THE OLD TIMER'S BULLETIN

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Published for the Old Time Wireless Operator, Historian and Collector

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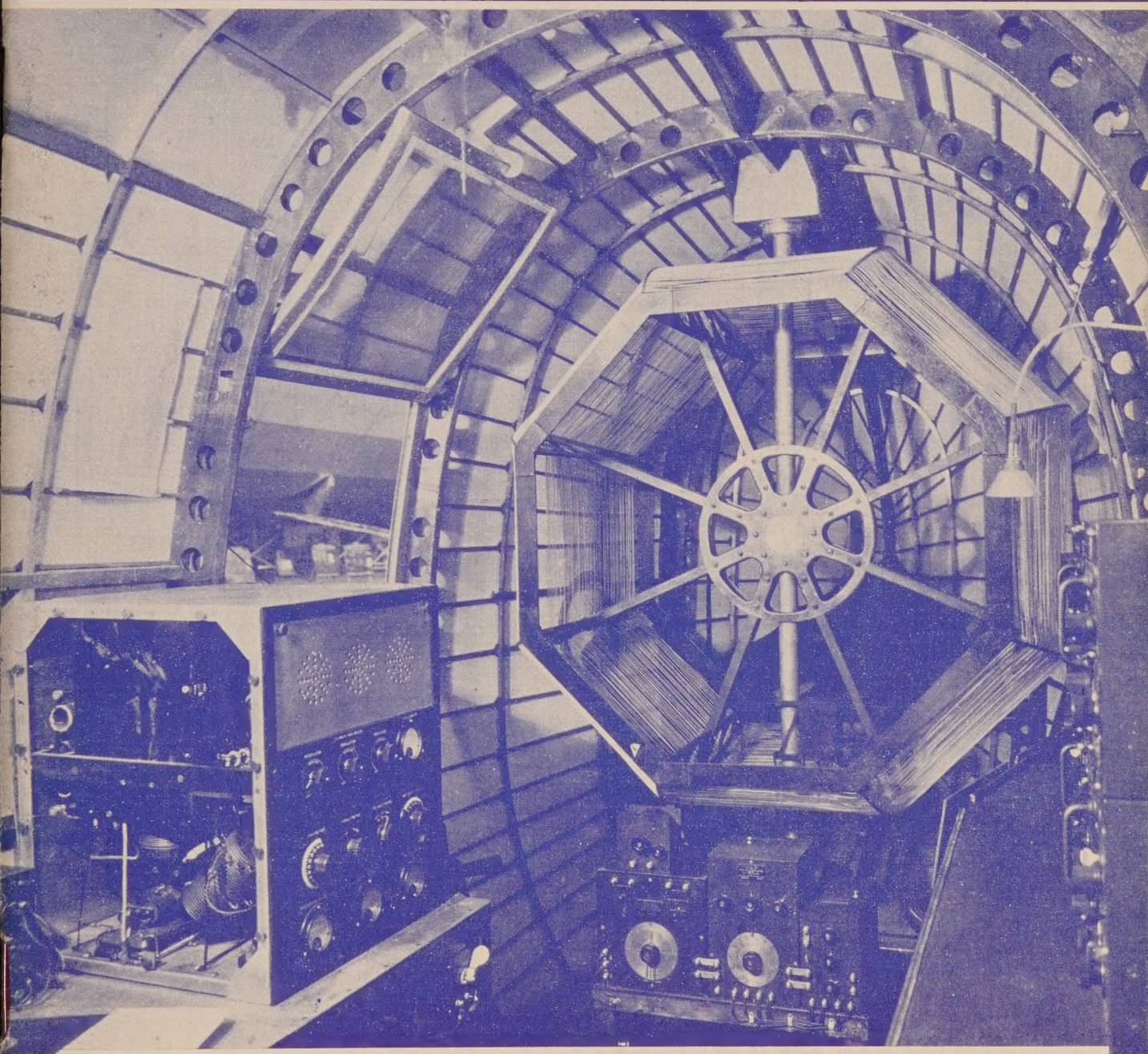

RADIO CABIN OF AN EARLY DIRIGIBLE

Partial interior of a "rigid airship" (Zeppelin) radio cabin showing radio compass and other equipment. This setup is contemporary with the Graf Zeppelin described on page 21. The picture is not identified but believed to be the "ZRS-4". The longwave receiving units in the lower center are in the AWA Museum...rare artifacts from the Naval Research Labs.

Devoted to research and documentation of the history of wireless communications.

Member:
American Association of Museums
Regional Conference of Historical Agencies

ANTIQUE WIRELESS ASSOCIATION, INC.

HOLCOMB, NEW YORK 14469

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"The Old Timers Bulletin"

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Asst. Editor: Dick Ransley

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Change In Address?

Mail information to the Treasurer who handles current mailing list. (NOT the Secretary)

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69 BOULEVARD PKWY
ROCHESTER, N.Y. 14612

AWA NETS [EST/EDT]

PHONE (SSB)--3866 kc. Tuesday 8 PM
Mon. - Wed. - Fri. at 9:30 AM
Sunday -- 7242 kc. 4 PM
Tuesday-- 14270 kc. at 5:30 PM

CW -- 3584 kc. daily at 4 PM
First Wed. each month at 8 PM

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WW-2 GERMAN SURPLUS GEAR
An article describing this equipment can be found in the August '80 issue of "CQ" magazine. Valuable info.

IMPORTANT NET CHANGE

Effective June 15, the Sunday Noon AWA SSB Net will move to 40 meters at 4 p.m. New frequency: approx. 7240 kHz. Note: This frequency will allow operation for General Class licensees.

What's Coming Next!
in the "Old Timer's Bulletin

The SE-1012-A Receiver
History of Kestor Solder Co.
The James Millen Company
Collecting Hallicrafter Equip.
Building a Browning-Drake set
Collecting early batteries
Magnavox Speakers
Armstrong's Super-Regen set
Story of CeCo & Triad Tubes
How to build a 1910 receiver
The SE1420 (IP-501) receiver
History of Magnavox Company
How to build an Autoplex set
plus much, much more....

COMING EVENTS
ANTIQUE WIRELESS ASSOCIATION

NEW YORK (Canandaigua)
NATIONAL CONFERENCE Sept. 25-28

MASSACHUSETTS (Boxboro)
N.E. ARRL Convention, Oct. 4-5

FLORIDA (St. Petersburg)
Florida Gulf Coast Convention Nov. 1-2

NEW YORK (Canandaigua)
Annual Business meeting, Nov. 2

NEW YORK (East Bloomfield)
Worker's Christmas Party, Nov. 29

SILENT KEYS

Hans Herman, W1AFL
Oscar Harrison, W5QKU
Wm. Otter, W2UGF

CONFERENCE MOTELS

The Canandaigua area offers many motels other than the Sheraton. Late-comers can always find rooms in the large Trenholm-East, north of Canandaigua and the modest Valley Motel near Holcomb.. if they don't mind a 10 or 15 minute drive. See program for location and telephone number.

REGIONAL REPRESENTATIVES and/or CHAIRMAN at regular A.R.R.L. Conventions or A.W.A. meets:

California (CHRS): Dave Brodie (W6PGQ) and Thorn Mayes (W6AX)

North-west: Warren Green (W7JY) and Tex Sloat (W7AHK)

Upper Mid-west: Joe Pavek (WØOEP)

Mid-west: Gary Liljgren (WØSH)

Florida: John Smith (W4ACG)

Indiana (IHRS): Ross Smith

South-east Conference: Lew Elias (W4DBT) and Bob Lozier

North Carolina: Brian Harrison, Ron Lawrence and Bob Lozier

New England ARRL: Alan Douglas and John Clapper (W1FMK)

New York ARRL: Lauren Peckham, Dick Ransley (WA2TLR) and Ken Conrad (W2IIE)

New York (Rome): Ken Gardner (W2BGN) and Yates Hoag (W2ILD)

NEW ENGLAND

The 1980 New England ARRL Convention at Boxboro, Massachusetts

October 4 and 5, 1980

AWA will again have a fine historical exhibit handled by John Clapper, W1FMK and Alan Douglas. Stop in at their booth and say "Hello!" and see the old gear.

FLORIDA

FLORIDA GULF COAST AMATEUR RADIO CONVENTION
Nov. 1 and 2, 1980
BAYFRONT CONCOURSE, 333 First St. So.
ST. PETERSBURG, FLA.

This promises to be another great get-to-gether for AWA members living in Florida. The Association will present the show "THE EARLY YEARS" featuring the early days of amateur radio with Clarence Tuska as commentator. This slide/tape production should be of interest to all. In addition, John Smith (W4ACG) and committee will have the usual fine historical exhibit.

NEW YORK

NATIONAL HISTORICAL RADIO CONFERENCE

SHERATON INN, CANANDAIGUA, N.Y.
Sept. 24,25,26,27 1980

Open registration at Conference. All meals and special events must be obtained in advance. Write: Dexter Deeley, 8 Briar Circle, Rochester, N.Y. 14618

ANTHONY CONSTABLE
Guest speaker at Annual Conference

Tony is editor and one of the founders of the British Vintage Wireless Society. A prolific writer, he has just completed a book titled "Early Wireless" to be published in England. More on this later. His talk will be in a form of a dialog with Dave Brodie (CHRS).

CONTEST/AWARDS

Don't forget the two new awards being made this year: the best homemade receiver (Elle Award) and the best old time tran smitter (Matlack Award). See June OTB, page 14 for details.
(Awards to be given at the Friday night dinner.)

OLD TIME TRANSMITTER

(August issue "Ham Radio Horizons)
Do you want to build a 50-year old transmitter and receiver? An exceptionally well written article on a Hartley oscillator can be found in the August issue. Written by Bill Orr, W6SAI, it tells how to build a little 10 watt 80 meter CW xmtr. In addition, Bill describes a 3-tube receiver built by Bob Chasin, W6ME-- an excellent replica of the original Pilot Wasp. A picture of W6ME's set shows an exact duplicate of the original. The "Ham Radio Horizons" magazine is rapidly becoming popular with the average ham. Interested? Write: Ham Radio, Greenville, New Hampshire 03048

History of a Comtemporary American Manufacturer

THE R. L. DRAKE COMPANY

The R. L. Drake Company and its SSB equipment needs no introduction to the amateur fraternity. The company was founded by Robert Drake in 1957 in Miamisburg, Ohio, for the purpose of manufacturing high grade single-side band equipment.

Drake's first set was the Model 1-A, which was reviewed in the November, 1957 issue of *QST*. This was followed by the 2-A receiver in 1960 and then the 2-B.

In the mid 60's the company made a considerable change in design philosophy -- a departure from triple conversion technique used in earlier receivers to dual conversion. This was the beginning of the R-4 series.

1973 saw numerous changes in the R-4C model, making it one of the finest sets on the market.

The popular TR-4 transceiver and T-4XB SSB transmitter.

The first transceiver was marketed in 1963 -- the TR-3, followed by the TR-4 and TR-4C. Additional models have since been introduced including the popular TR-7 in 1978.

Drake is one of the few American firms manufacturing amateur equipment. It enjoys an excellent reputation, and my friends who have had need for service tell me the response and cost can't be beat. The last time I checked I found the company was employing about 270 with Peter Drake (Bob's son) as president. A fair percentage of the engineering and testing departments have licensed radio amateurs as employees.

— Bruce Kelley

ASSOCIATION NEWS

Report on recent *AWA MEETS*

Reports coming in from AWA representatives and members who attended recent AWA meets indicate the recession (and gas prices) haven't slowed down interest in historical radio and collecting.

Our first regional meet of the season was at Charleston, S. C. where the efforts of Patsy Hicken at the WSCS Museum didn't go un-noticed. Top programming plus over 100 at the banquet made it the largest held in the south-east.

The IHRS "gang" had another winner as usual with 170 registered plus some stragglers at the Auburn Museum of automobile fame. Only mishap was the return of the AWA movie which is mentioned elsewhere in this bulletin.

We were pleased to see CHRS again at Foothill Museum-- the latter having problems as result of Proposition 13. The CHRS/AWA spring meet is one of the largest on the west coast and attracted members from a wide area. A well organized club.

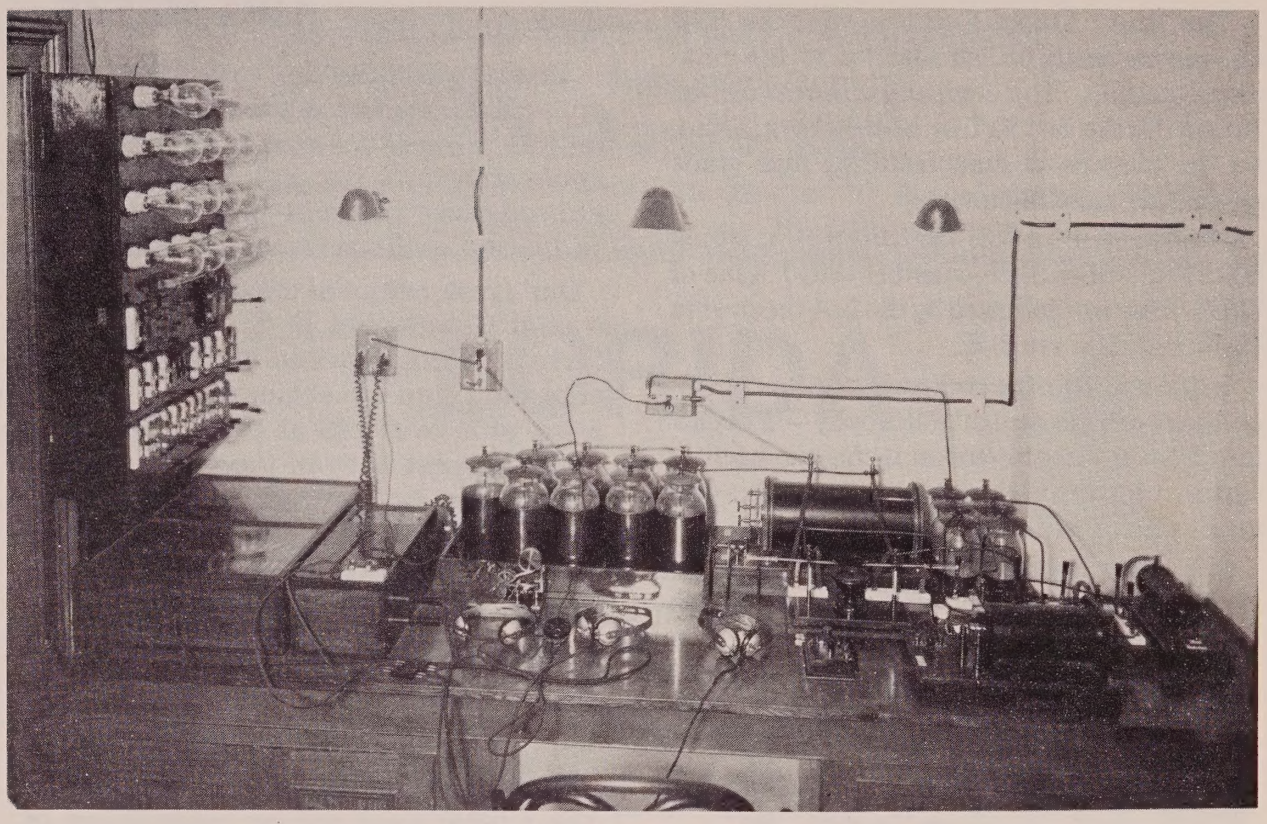
The local "spring" meet at Holcomb drew 66 for lunch plus an additional 20 or 30 passing through the flea market. This was surprising since the gathering had little publicity and program.

Joe Pavek and Committee again outdid themselves with a good turn-out in Minneapolis. Good program, dinner and fine market activity plus the usual visit to WØOEP's exceptional museum.

In addition, AWA was represented at several ARRL Conventions and Hamfests where members manned booths with historical equipment. AWA officers and Board want to thank all participants-- a great job done by all....

One last comment-- there were two conflicts in dates: two events unfortunately were scheduled the same weekend. Although it is doubtful it greatly affected attendance, we wish chairman of various "meets" would write Chuck Brelsford or Dick Ransley as soon as a date has been selected. They may be able to avoid a conflict with another gathering.

A 1907 AMATEUR STATION



THE 1907 STATION AS PICTURED IN THE NEW YORK TIMES

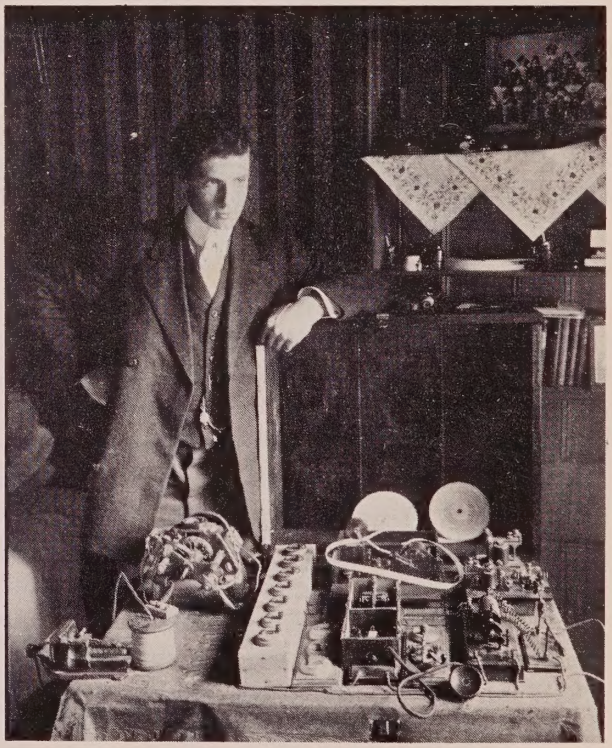
The above picture appeared on the first page of the second section of the Nov. 3, 1907 "New York Times". All equipment is now on display in the AWA Museum except the bank of light bulbs at far left (used to drop 110 line voltage). This could well be the oldest complete intact amateur station in the country.

The receiver is at far left, Leyden jars in center with Morse tape register in front of jars. At right are several vibrator type spark coils. Apparently the operator had a choice of different voltages. Most of the gear bears a nameplate indicating it was made in France.

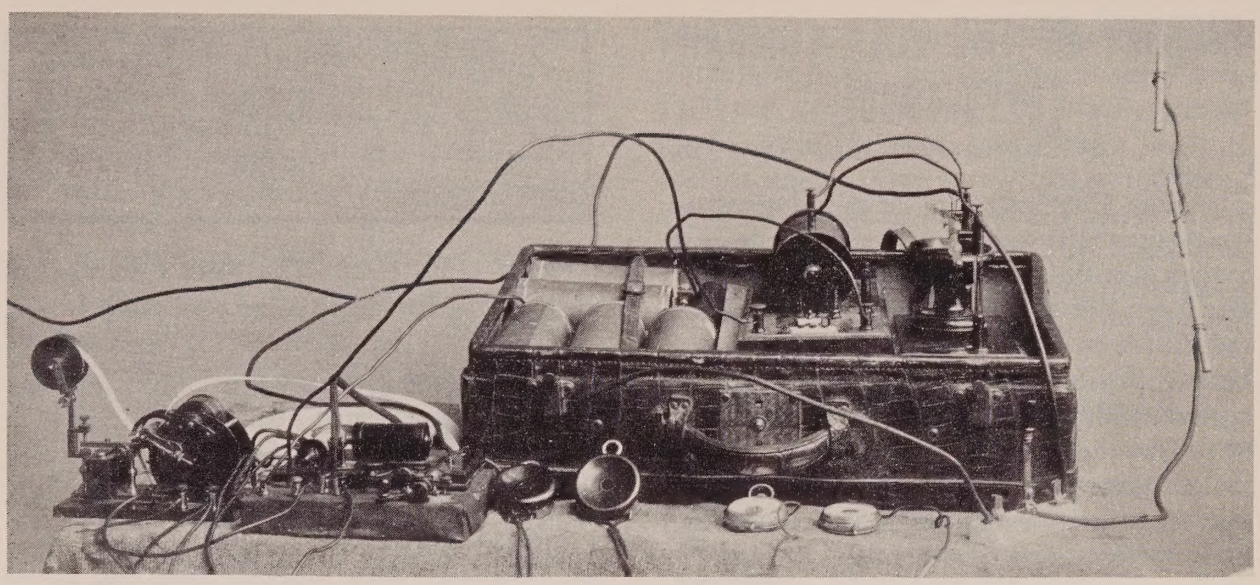
This is not surprising since there were few companies, if any, manufacturing wireless equipment for amateur use in this country. An interview I had with Hugo Gernsback several years ago tells of the unavailability of equipment for the amateur before 1907. He imported gear and founded the Electro-Importing Company. He eventually made his own.

The station was constructed in 1906-07 by pioneer Walter J. Willenborg in Hoboken, New Jersey. It is described in detail in the 1907 newspaper article. As was the custom of the time before licensing, the owner used his initials for call letters: "WJW".

[Cont. on next page]



A PICTURE OF THE YOUNG AMATEUR AND HIS FIRST STATION TAKEN IN EITHER 1906 OR 1907.



W.J.WILLENBORG'S SUITCASE STATION. COULD THIS BE THE FIRST PORTABLE?

About 1913 he improved the station with a J. F. Arnold double-audion receiver which was featured in the last Bulletin. Prior to this he used either a coherer detector (to actuate the register) or a mineral or "imperfect" type for headphone reception.

Just before (or after) the War, he purchased a 1/2 KW Clapp-Eastham Hytone spark transmitter and in 1919 or 20 he had the J. F. Arnold Company make a 3-tube receiver. It would appear he lost interest in radio sometime in the early '20s. He became a Silent Key in 1962. All items mentioned are on display in a special showcase in the AWA Museum.

The Association is deeply indebted to Walter's son, Richard, and his three brothers for this most unusual and rare exhibit. There is also need to mention Bro. Patrick Dowd (W2GK) who visited the old Willenborg home in Hoboken and removed the artifacts from the attic where they had been untouched for nearly 60 years. (B.K.)

WORLD'S FIRST WIRELESS OUTFIT FOUND IN LONDON TENEMENT

The crude but sensitive instruments with which David Hughes first discovered wireless waves have been unearthed in a London, England, tenement and transferred to a place of honor in the South Kensington Museum. Hughes experimented with electric waves long before Marconi, but the latter gained the distinction of being the discoverer because he was the first to recognize them as ether waves.

The newly found instruments consists of a spring wound device that sent out electric impulses at regular intervals, and a carbon microphone used by Hughes as the detector. History tells us that during an experiment in 1879 Hughes started the transmitter and then walked slowly away from his laboratory with the receiver in his hand, noting how far the sounds could be detected. At times he was able to hear them 500 feet distant.

Although Hughes was an extremely able scientist, he lived and worked in a frugal manner. Most of his instruments were made up of odds and ends, such as pins, needles, scraps of wire, and pieces of metal utensils. Yet even with these he was able to produce delicate mechanisms that were the forerunners of those in operation today. The carbon grain transmitter was first studied by Hughes and a widely used electrical device known as an induction balance was invented by him. Later he published a theory of magnetism that brought him distinction.

Hughes was born in America, where he lived during his early years; but after inventing a printing telegraph he moved to England and the Continent. There he tried for many years to have the machine approved by foreign telegraph firms. Finally, after being accepted by the French government, it was adopted by all the leading companies and brought wealth to the inventor.

(Report from Frank Kodousek)

HISTORY OF THE ROLA COMPANY (1923-1980)

by Charles Perry and Floyd Paul

This is another fine historical documentation on early loudspeaker development by Floyd Paul (W6THU) and Charles A. Perry (W8CEM). The later is Vice-President, Engineer of the Rola Company.

The Rola Company, one of the oldest loudspeaker manufacturing companies in existence, made a humble beginning in the Spring of 1923. Ben Engholm, working in the back room of a radio store on the second floor of a building in Seattle, Washington; decided one day that the reproduction of sound from early radios could be substantially improved by utilizing a device that would provide a listener with a wider range than was available with the early head sets and basic speaker designs of that day. Ben went to work, came up with a new design and demonstrated a working model at a home before a number of his friends.

Present at this time was a well-to-do man who listened to it, and said, "I want one of those, how much will it cost me?" Ben thought, rather quickly, and said "$50". The man said, "Go to work". In order to further this particular endeavor, Ben enlisted the aid of a second gentleman by the name of Henry Tenny. A partnership was formed with initial capital of $200.00, which was supplied by Henry Tenny. On June 7, 1923, the business was suddenly converted into a corporation because a personal creditor of Ben Engholm levied an attachment on the business for a very minor claim.

The business made slow progress, largely for want of capital and experience, until the occurrence of a somewhat successful fire--which resulted in the underwriters over-estimating the damage to a second-hand lathe and two drill presses, which constituted the total plant equipment. It seems that directly under their operation was a drug company that was involved in re-cooking denatured alcohol and their still blew up! The insurance company paid them $400.00 for damage, and this got The Rola Company moving.

The name "Rola" has no specific meaning. The name was arrived at by successively trying various by-syllabic combinations, with L A as the second syllable. This was done because of the wide-spread use of this syllable as a suffix to trade names of musical devices. The fact that the word Victrola includes Rola is pure coincidence.

The Rola Company continued in Seattle, Washington until May 16, 1925, when it moved to Oakland, California and was incorporated in the State of California on the 12th of May, 1925. The Rola Company of Seattle was continued as an entity unil July 1, 1931 when the Seattle connection was dissolved.

In 1926, the company moved to Cleveland and was incorporated under the Ohio laws in March of 1927. The Rola Company operated in Cleveland, Ohio from March of 1927 to July of 1937, at this time a new company was organized "The Rola Company Incorporated". Subsequently, after several years, the Oakland branch of the company was dissolved. In 1943, the Rola Company became a subsidiary of The Rola Company, Incorporated. This situation continued until the death of Ben Engholm in 1945 when his widow sold Rola to the Muter Company of Chicago at which time The Rola Company, Incorporated, became a subsidiary of the Muter Company.

Figure 1 -- Rola table cone, pedestal cone and horn speaker.

On November 15, 1948, Les Muter, who owned the Muter Company, acquired Jensen and this in turn became a wholly owned subsidiary of the Muter Company.

Rola continued to be operated as a subsidiary until approximately 1971, when Les Muter died and the property settlement involved selling the Muter Company to a firm at that time

engaged in electrical distribution work, by the name of Potter-Englewood. A new name was formed for the corporation and it became known as Pemcor, Inc. The word Pemcor is an acronym standing for Potter-Englewood-Muter Corporation.

In September of 1978, the Board of Directors of Pemcor entered into an acquisition agreement with Esmark, which is a multi-billion dollar holding company. The corporation, under Esmark, continued to be known as "Pemcor" until very recently. A decision was made not long ago, and it is effective now, that the official name of the Rola Company is "ROLA®, an ESMARK Company". The name of the corporation has been changed from "Pemcor" to "International Jensen, Inc". The corporation consists of Rola, Jensen Sound Laboratories, General Magnetics, Videocraft, and Potter Company.

The Rola Company has always been a very stable company as is evidenced by its present financial position and growth. There are some employees that have been at Rola as long as 44 years. Offices are located in Cleveland, Ohio and manufacturing plants in two different sites in Pennsylvania.

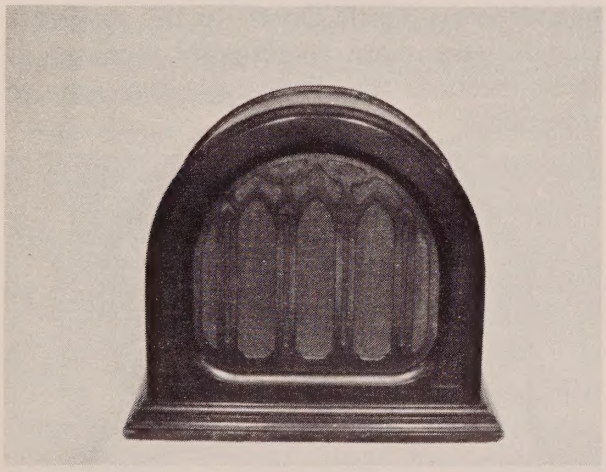


Figure 2 -- Model 20 Cathedral cone speaker.

EARLY SPEAKERS

The origin of the name Re*Creator used by Rola for their early speakers is brought to light from early Radio News ads which stated the horns were designed to re*create all sounds exactly as the sounds were originated, hence "Re*Creator".

The driver unit used in Rola Horn speakers is a magnetic armature type which is coupled to a mica diaphram by a stiff iron wire. Two horn speakers made in Oakland measured 2,000 ohms dc resistance. One of the horns was tested at 1 KHZ and had a 16K ohm impedance. Three table model cone Re*Creators measured 1100 ohms (+ 100 ohms). It is believed that the Seattle-made horn speaker had a lower dc coil resistance. (One sample found measured about 825 ohms.) See Table 1 for listing of early Rola speakers and Figure 1 for picture of Rola table cone, pedestal cone and horn speakers. Figure 2 shows the Model 20 cathedral cone speaker.

Early Rola Speakers - Tabel 1

model	Year introduced	description
Re*Creator	23	Horn Spkr - Upright
Re*Creator	25	HornSpkr - Cabinet Model
Re*Creator	26	Cone Spkr - Table
Re*Creator	27	Cone Spkr - Pedestal
20	28	Cathedral - Cone
A	28-29	Cone unit - magnetic 7⅝" dia.
M**	28-29	Beefed up "A" model
C, D, J **	28-29	Dynamic, J - 7⅝" dia., C - 9" dia.
R	29	Power Series (80 tube) 12" dia.
K	30	Midget
R & S	30	Electrodynamic, S - 8¼" dia.

** C, D, J & M took on many configurations such as 280 tube rectifier, dry oxide rectifier, no rectifier, p. p. input transformer, cabinet mounted, etc. - All of these configurations took on different model identifiers.

burstein-applebee

...folds in Kansas City...

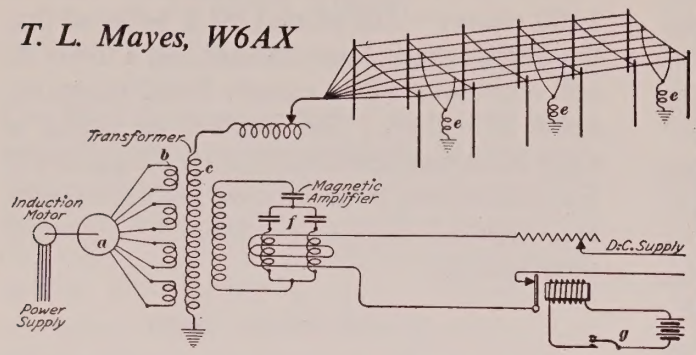
This well known radio/electronic supplier was founded over 50 years ago. Many an old time radio man ordered equipment from their well-illustrated catalog. B-A as well as several other pioneer organizations are now bankrupt. Remember Wholesale Radio Service (later Lafayette) at 100th 6th Ave., N.Y.C. ? -- they too have had to pull in "their strings" with local operation only.....all fond memories.

WTAM

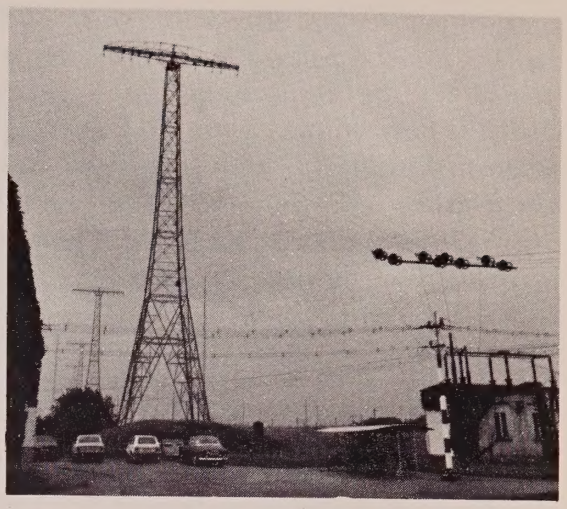
Several members called the Editor's attention to the power level of broadcast station WTAM as noted in the last OTB "Close-up" column. It stated the output was 2500 watts. This is correct for the year 1925 as written. It wasn't meant to be a treatise on the subject. Like most early BC stations it started at a low power level with 250 watt tubes (1923), graduated to 2500 watts in 1925 and a few years later went 5000 watts with a W.E.xmtr.etc.....

A LIVE GHOST FROM THE PAST

T. L. Mayes, W6AX



Basic circuit of Alexanderson system



Station at left with 375 ft. towers and 6,600 ft. antenna

Picture yourself in 1980 seeing a 6600 foot long, flat top antenna, supported 375 feet high, as you approach a present day radio station. Inside you see a 200 KW Alexanderson alternator, with all controls, ready for operation, just as it was installed over 55 years ago.

Mr. Kaye Weedon of Oslo, Norway, recently had this experience when he visited that station at Grimeton, near Varberg, Sweden, on his way to the USA, and took these pictures to prove it was not a dream.

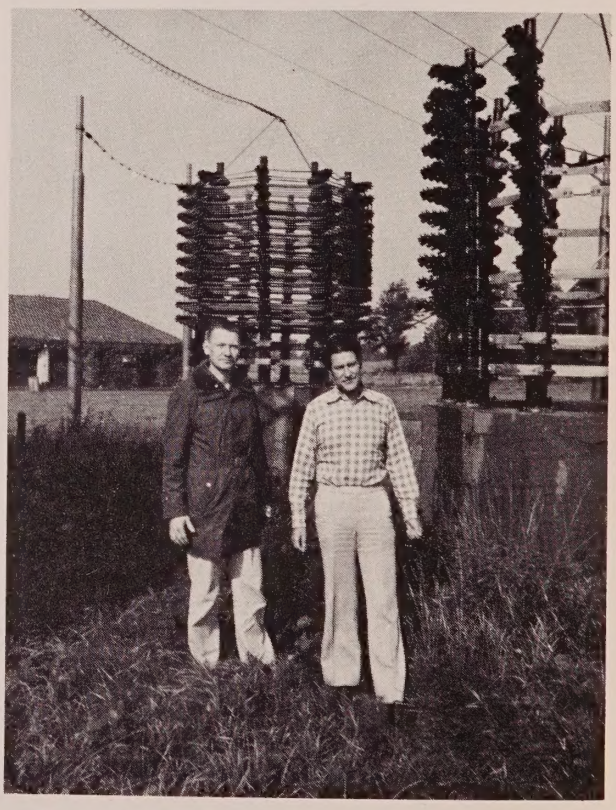
Negotiations between the U.S. and Germany for ending WW-I were carried on directly by wireless using a new 200 KW high frequency alternator transmitter designed by Dr. Ernst Alexanderson. They were built by General Electric, and installed in the New Brunswick, New Jersey station of the Marconi Wireless Telegraph Company of America, then operated by the U.S. Navy. This transmitter operating on a wavelength of 13,760 meters (approximately 22 KHz) produced the strongest signal heard in Europe from any American station.

Because of the excellent performance of this station, an American radio communication company, Radio Corporation of America, was formed late in 1919, with plans to build a world wide communication system using the new transmitter. A total of 20 sets produced by General Electric were installed by R.C.A. around the world in pairs between 1920 and 1924. They operated on wavelengths from 9,000 to 21,000 meters, 32 to 14 KHz.

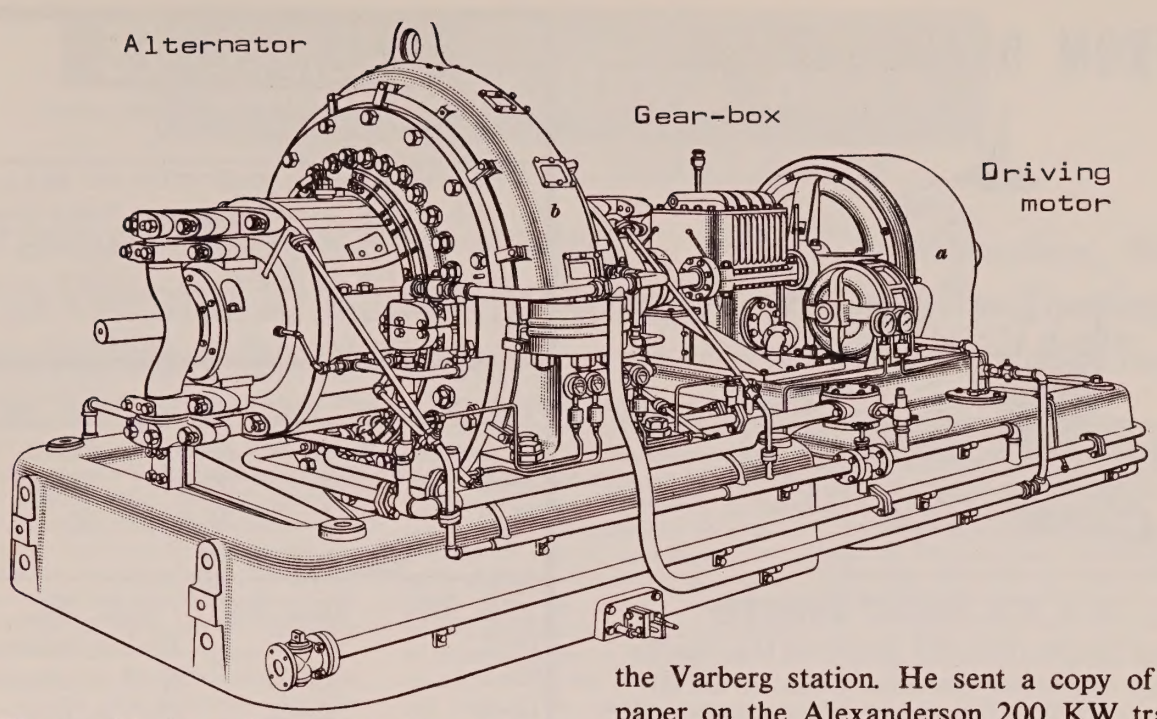
By the mid thirties many of these VLF sets had been replaced by HF tube transmitters but most of them were still in place when WW-II started.

On an emergency basis in 1924, one of the sets from Bolinas, California, and one from Marion, Massachusetts, were shipped to Hawaii and installed in the Haiku Valley by the U.S. Navy for communicating with our war ships and submarines in the Pacific theater during WW-II. The remaining set at Bolinas was also used for this purpose, and the Marion and Tuckerton transmitters were used for communication in the Atlantic.

In 1949 the U.S. Air Force moved a set from Radio Central to Marion to replace the one that went to Haiku, and continued to operate the Marion station until 1957 for teletype communication with their base in Tule, Greenland, as well as several temporary stations on ice islands in the Arctic Ocean, as the alternator signals were more consistently received in these locations than from any other type of transmitter.



Station manager and operator at the Varberg, Sweden site.



The two Marion units were the last of these early sets in the U.S. One was scrapped in 1961 and the other went to the Smithsonian Institution, but a number of its accessories were used in building the Bureau of Standards VLF time station in Boulder, Colorado.

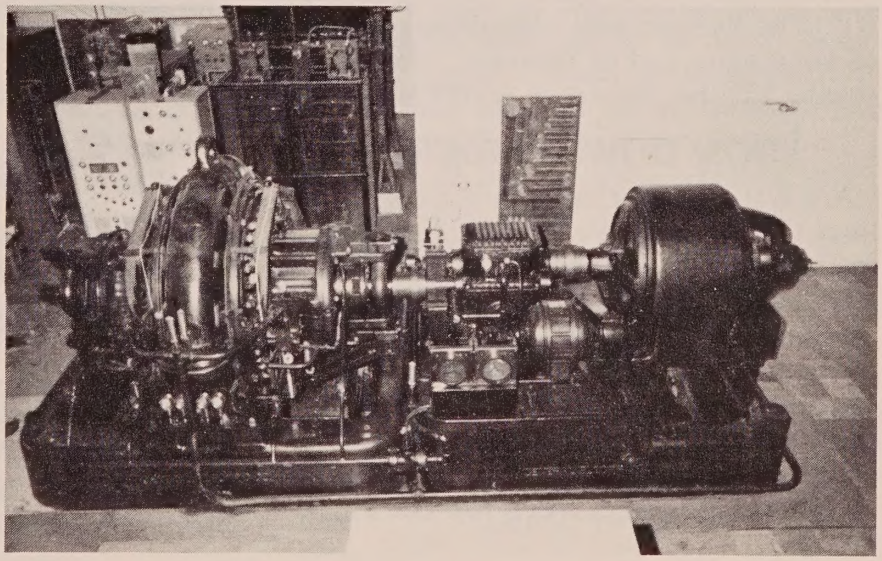
In 1923 two of these sets had been installed in Warsaw, Poland, and in 1924, two in Varberg, Sweden. Varberg started handling traffic late in 1924 but the official opening of the station was July 2, 1925.

My letters to both Sweden and Poland asking for information on the performance and final disposition of these installations were not answered. The office of the Director General of Norwegian Telecommunications advised that the Varberg station operated thru WW-II and after that was made into a museum.

Mr. Weedon, a radio historian, was recently studying the events leading up to establishing the Varberg station. He sent a copy of my paper on the Alexanderson 200 KW transmitters (published by the Society of Wireless Pioneers) to the Swedish radio authorities and was advised that one of the Varberg transmitters was operable and that if he would visit the station they would be glad to operate the set for him.

While there he learned commercial traffic had been handled thru 1946 with call letters SAQ, operating on a wavelength of 17,740 meters, 17.2 KHz. One set had been scrapped around 1960; the other set with all accessories including the massive antenna, is kept in operating condition by a station manager and his assistants. The transmitter is started up and put on the air for a brief period monthly.

Anyone who wants to see a real pioneer station, the last of its kind (unless the Warsaw transmitters are still available) should make arrangements to visit this station near Varberg, Sweden.



The 200 kw. Alexanderson alternator in the Varberg station. Unlike most American installations, the RF transformer is mounted above the switchboard instead of the alternator. Can this be the only alternator of its kind still in operation ?

FROM HEADQUARTERS

Close-Up

ROCKY POINT PHOTO

The unusual cover photo of the Rocky Point longwave antenna (March OTB) brought a letter from OT Carl Maylott (W2YE). Carl was on duty at RCA Riverhead at the time (1-24-25) where he was checking the effects of the eclipse (measuring signal levels) on foreign radio telegraph signals.

The observations were somewhat disappointing since there appeared little difference in signal level during the eclipse. One of the reasons could have been the eclipse darkened only a small part of the world at a given time. The observations were made on longwaves. A more noticeable difference could have been noted on shortwave.

SEARS & ROEBUCK

I just received in the mail a tape cassette from Bob Cobaugh, W2AY, of a recording made about 1927. It is of a record sold by Sears under the name "Silvertone" -- sounds familiar doesn't it? The record was completely devoid of scratches, and of interest, the label states "To be played at 80 RPM".

FROM DOWN UNDER

Art Williams writes from New Zealand telling of a new collectors club in the area (three new clubs have also been formed in USA since the first of the year). Art's interest includes listening to DX with early receivers as well as collecting telephones-- he works for the New Zealand Post Office as a telephone installer. How many members use early tube receivers for DX listening ?

BACK ISSUES

Historical reference and good reading.....

The following OLD TIMERS BULLETINS remain in stock. Make out check to A.W.A. and mail to:

DEXTER DEELEY
8 Briar Circle
Rochester, N.Y. 14618

Vol. No.	Vol. No.	Vol. No.	Vol. No.
15-1	16-4	18-3	20-2
16-2	17-2	18-4	20-3
16-3	17-3	19-4	21-1

$1. each ppd.

Vol. No.	Vol. No.	Vol. No.
12-1	14-4	19-1 w/mono.
13-1	15-2	19-3 w/mono.
13-2	15-3	20-1 w/mono.
13-3	17-1	20-4 w/mono.
14-3	17-4	$2. ea. ppd.

Vol. No.	
7-4	$3. ea. ppd.
11-3	
18-1	

Vol. 1 #2 and Vol. 1 #3 Reprints for reference 40¢ each ppd.

As a result of a recent inventory, AWA has a surplus of duplicate radio and electrical books. Send SASE for list.

RADIO NEWS

I frequently receive requests for general information on early radios. Other than Morgan McMahon's vintage radio books, I usually recommend new collectors to read old radio magazines of the 20's and 30's such as "Radio News", "Radio Broadcast", "Popular Radio" and others of the period. On this subject, a letter from Floyd Lyons tells of his completing his "Radio News" collection-- solid from July 1919 through December 1933. This is something to shoot for...particularly the 1919 and 1920 issues.

CROSLEY CONFIRMED

Jerry Sears confirms the set pictured on p. 14, Vol. 20 #3 OTB as a shortwave converter. There was some question since it could have been a simple shortwave receiver. Information can be found on p. 213, Jan. '28 issue of "Radio Broadcast" magazine..

[Continued on next page]

Communications news

BRIEF REVIEW OF RECENT EVENTS

Transmit Magazine Pages Via Westar to Midwest Area

Pages of the Western and Midwestern editions of *Time*, *People* and *Sports Illustrated* magazines are now transmitted via Western Union's Westar satellite to Time, Incorporated's earth stations located at printers' facilities in Chicago and Los Angeles. Once received, text and four-color photographic material are converted to hard copy for press runs.

Pictures, layout and copy generated at Time's New York City headquarters used to be sent to these printers via either microwave landline or airplane.

According to Philip Schneider, Western Union's vice president, Satellite System Services, this is the first time that small earth stations have been used to receive facsimile magazine copy, and it also marks the first use of satellites for relaying full-color pictures for commercial reproduction.

Transmitting color pictures via satellite now is possible because of a new facsimile device which converts pictures into a high speed digitized format.

Once the conversion is made by Time Incorporated's engravers in New York, pictures are sent via microwave to WU's earth station at Glenwood, New Jersey. From there the pictures, along with printed copy are transmitted via satellite to printing plants in Chicago and Los Angeles at 112,000 bits of information per second. The satellite transmission gives greater flexibility in carrying late-breaking news, a Time spokesman said. The transmission is also faster and more cost effective, he said.

Reprint Communication News

'The Shadow' dies

MISSION, Kan. — A funeral for **Grayson Maynard Enlow**, the voice of *The Shadow* on network radio during the late 1940s and ear'y 1950s, will be held here today.

Enlow, 63, died Sunday. He was a veteran Broadway actor and a radio announcer for more than 40 years.

His Broadway credits included *My Sister Eileen*, *Of Thee I Sing*, *Time of Your Life* and *The Big People*.

Gus Haenschen, 90; Orchestra Conductor On Early Radio Shows

Gus Haenschen, an orchestra conductor and arranger for major radio shows, died in Stamford (Conn.) Hospital on Thursday. He was 90 years old and had made his home in Norwalk, Conn.

Born Walter Gustave Haenschen in St. Louis, he was a graduate of Washington University. He was an executive of Brunswick Records during its early days, and was instrumental in forming the team of Billy Jones and Ernie Hare. From the mid-20's until the late 40's, Mr. Haenschen was associated as conductor and arranger with a number of famous radio programs: "American Album of Familiar Music," "Maxwell House Show Boat," "Lavender and Old Lace," "Bayer Musical Review," "Coca-Cola's Song Shop,""Chevrolet Hour," "Palmolive Show," "Pet Milk Saturday Night Serenade" and "Chase and Sanborn Hour."

He was the composer of such songs as "Manhattan Merry-Go-Round," "Rosita," "Lullaby of Love" and "Under the Japanese Moon." After his retirement as a conductor, he was associated with G. H. Johnston in the New York Philharmonic and Metropolitan Opera radio broadcasts.

Close-Up

ANTIQUE SALES

My comments on high prices in the last OTB brought several interesting letters. Let me continue. I just read that a regulation U.S. Springfield army rifle, Model 1903, sold for double its estimated price of $5500 or $11000. This startled me since I remember, as a kid, they could be purchased for as little as $25. A good deer hunting rifle although a bit heavy. I read on.

It seems this particular gun was issued in 1903 and immediately recalled for modification at the insistence of Theodore Roosevelt. This never-fired unaltered model is believed to have been presented to former Secretary of War Elihu Root on his retirement.

Now this brings up provocative question: should a one-of-a-kind radio receiver have far greater value than a conventional set ? Are radio artifacts made, or once owned, by a well known person have greater value? To some degree, yes...but from my experience I have yet to see someone fighting over a receiver once owned by a celebrity--or an odd model that has different dial arrangement or in original carton.

COLLECTING INSULATORS

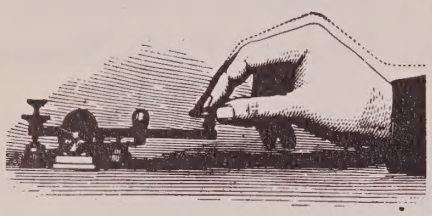
Along the same line, I noted the prices at a local Bottle Show where they had a section devoted to insulators (pole types for telephone and electrical lines). Seems the more common ones are still selling for less than $5., but the more rare ones have gone up in price. For example, ceramic type insulators-- particularly the threadless types made by Elliott Insulator Company of Bennington, Vt. Threadless "Elliotts" are currently selling from $200 to $800 a piece!

U.P.S. PROBLEMS

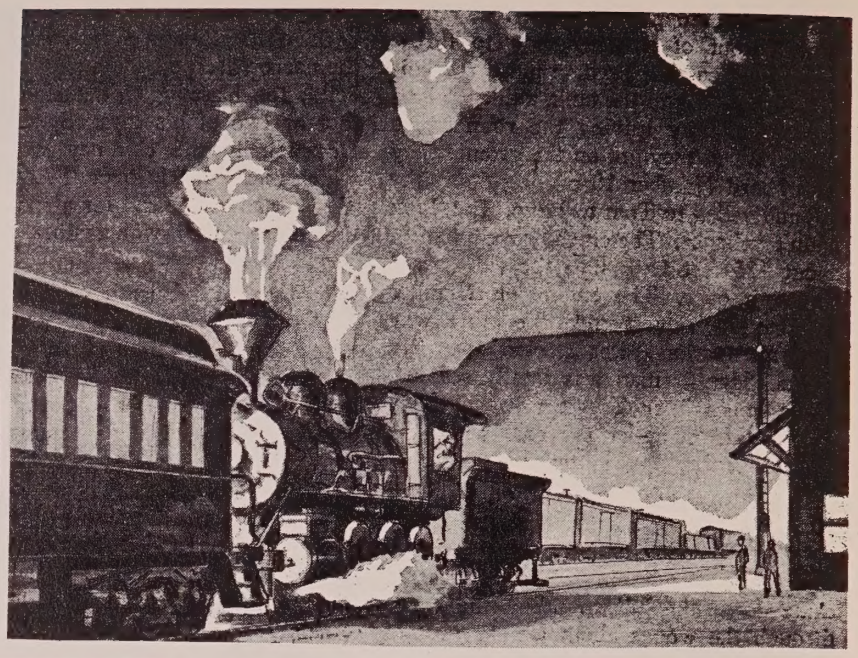
Yes, United Parcel Service almost lost the Association's historical 16 mm. sound-movie on the trans-atlantic cable.

[Cont. on p.25]

THE DEVIL AT THE KEY



[From "Arizona Story"



This story was written by R. Bowers and sent to AWA by Bob McCarty. The scene: a railroad station in the Rockies in the 1890's. A lone telegrapher is on duty.

As I sit in my office this evening listening to the rain pattering on the roof, I recall to mind an adventure that occurred to me when I was a young knight of the mystic key, many years ago.

I had not been an operator very long when I was sent to Volcano Springs, one of the loneliest places a human being could live in, on the line of the Southern Pacific railroad. During the hot summer months in that country we have what are called cloudbursts. One minute the sky will be perfectly clear, and in the next forked lightning will be playing across the sky, rain falling in perfect sheets, and in an hour or two the sky will be as clear as a wedding bell. We were having these cloudbursts daily, and even then as I sat in the office, one could be seen coming from the mountains several miles away to the west.

Just then I heard a footstep, as though someone was trying to see how easy he could walk, near my door, and instinctively I put my hand to my belt for my revolver, which I always carried. It was not there, and then I remembered I had not replaced my belt after taking a nap that afternoon, and was rising to go to my bedroom for it, when a man, dressed in blue overalls and red shirt, stepped through the doorway, and covering me with a pistol, commanded me to throw up my hands. He was a powerfully built man, and had his face hidden by a mask made out of a red handkerchief.

I did as he commanded and he tied me very securely to one of the braces of my little office. Perhaps you don't think I was frightened; but I was, and it took me several minutes before I could recover my usual composure. I was wondering what on earth he was holding me up for, when his next actions revealed his whole plot.

Stepping over to my switchboard, he grounded the wires west, thus cutting off the train dispatchers at Los Angeles. That he was an operator there was no doubt, and the question was settled in my mind when he sat down and began calling Yuma for a "9" which means on a wire "train order." When Yuma answered he gave him the following order: "To C. and E. No. 20: No. 20 will meet extra engine 1213 east at Old Beach," and signed the superintendent's initials to it. After completing this order he began calling Mammoth Tank, where a large helper engine was kept to assist heavy trains over Pilot Knob. This is the order Mammoth Tank received: "To engineer, extra east: engine 1213 will run extra Mammoth Tank to Ogilby and meet No. 20 at Bartram."

As I heard this my blood ran cold with horror. There that villain sat making a lap order with those two trains as unconcernedly as possible. Each train would try and make its respective meets which would result in their colliding half way between the two sidings. I closed my eyes and shuddered. Even then I imagined I could hear the passengers' wild shrieks as they were hurled into eternity. Little did those passengers realize that they sat in their coaches, how near they would be to their Maker. My hands burned to get at the villain's throat, but he made a good job of securing me.

Suddenly the cloudburst broke upon us. Rain descended in torrents; the thunder rolled across

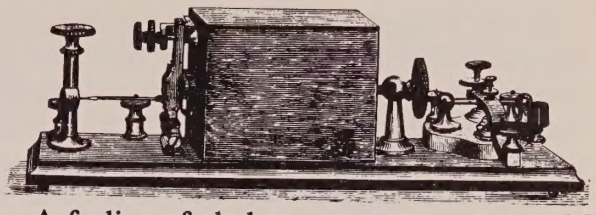
the sky like charges of heavy artillery, and lightning flashed incessantly. Darkness soon came upon us, but there was no sign of the cloudburst stopping. When the lightning flashed I could see the robber still at the key, and I knew he was waiting for the helper engine at Mammoth Tank to sign its order and rush to its doom.

For nearly five minutes there was a lull in the storm; then it recommenced with still greater violence. Suddenly I heard a crackling sound; saw a great flash, and then I was thrown violently across the room. I was stunned for a few seconds, and upon rising found that my hands were free. An instant later another flash came, and it lit up the interior of the office like day.

In that short space of time I saw the robber still at the desk. He had not noticed my escape, I thought, as I threw myself upon him, and clasped him by the throat, but the instant my hands touched his flesh I recoiled in horror. He was stone dead. His face was burned black; part of his red shirt was torn off, and the hand that held the key was black and shriveled. Now I saw what had occurred.

Lightning had struck the wires outside, and running through the instruments had killed the robber instantly. The brace that I was tied to held the ground wire, and that was how it had freed me.

Hastening to light a lamp, I remember that the order to the engine was not completed yet, so I rushed to the desk and pulling the robber out of the way began calli ng "Ex, Ex." Raising him with half a dozen calls, I asked him if the engine was ready yet. He said no, but that it would be in a minute or two.



A feeling of gladness crept over me, and I realized that I had just enough time to save the train. Taking the key again, I began to annul his order, and had just finished it when I felt my senses leaving me, and for the first time in my life I fainted. When I came to, I was on board No. 20, bound for Los Angeles, with all the passengers crowding around me, shaking my hand and thanking me for saving their lives.

The dead robber was never identified, and he was buried at Mammoth Tank next day. Later, half way between Old Beach and Bartram, were found traces of a camp, and there is little doubt that the robber's confederates were camped there, ready to plunder the train when it was wrecked.

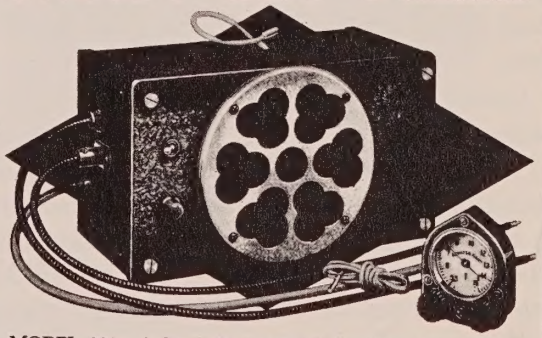
The railroad showed appreciation toward me by promoting me to the position of train dispatcher, and not long afterwards I received an elegant diamond ring from the train crews; their thanks for the part I played in a night's adventure. R. R. Bowers

Yuma Sentinel, 1895

Meet the Collectors

ATWATER KENT

Motor Car Radio



MODEL 666—A Six Tube Powerful, Sensitive Automobile Receiver. With Atwater Kent noise filter—three gang condenser—large dynamic speaker—tone control—local distance switch—triple shielded power conversion unit—excellent tone—steering column or instrument panel control.

So you think an Atwater-Kent bread board receiver is rare ? --- the odds are you'll find this 1934 A-K car radio equally difficult to find and pay almost as much!

LOEWE RADIO

by Alan Douglas

Loewe multiple tubes are still a mystery to most collectors, although much has been written about them. Tyne's *SAGA* treats them in some detail, and the January 1976 *ELECTRONICS* (Australia) calls them the first "integrated circuit" (reviewed in the June 1976 *OTB*; I haven't seen it).

These tubes grew out of original work by Manfred von Ardenne and H. Heinert on the resistance-coupled amplifier, reported in *Wireless World* for September 23, 1925. (Von Ardenne, by the way, was later known for cathode-ray-tube work, and is still active in other fields). They found ways to combine high-gain triodes and tetrodes with stable high-value resistors (sputtered metal films on glass, developed by Dr. Siegmund Loewe) to make a small low-power-drain amplifier that had higher gain than a conventional transformer-coupled amplifier.

Loewe marketed separate tubes for this service (described in Tyne's *SAGA*) but at the same time, he conceived the idea of placing an entire two- or three-stage amplifier inside one glass bulb: tubes, resistors, and capacitors. He made two tube types: the 2HF with two high-frequency tetrodes, and the 3NF (Nieder Frequency) with three audio-frequency stages. These are described in Tyne's *SAGA* and in *Wireless World* for December 16, 1925.

The next step was to design a complete radio around one of the new tubes. This had two advantages: the radio itself could be very simple since it had few parts, and, because German radios were taxed partly on the number of tubes used, these "one-tube" sets were economical to own.

Loewe's first model, exhibited at the Berlin radio show in September 1926, was the OE-333, built around the 3NF tube. The radio chassis contained little more than a pair of plug-in coils tuned by a mica variable capacitor; everything else was in the tube. The OE-333 proved very popular and was exported to neighboring countries, too.

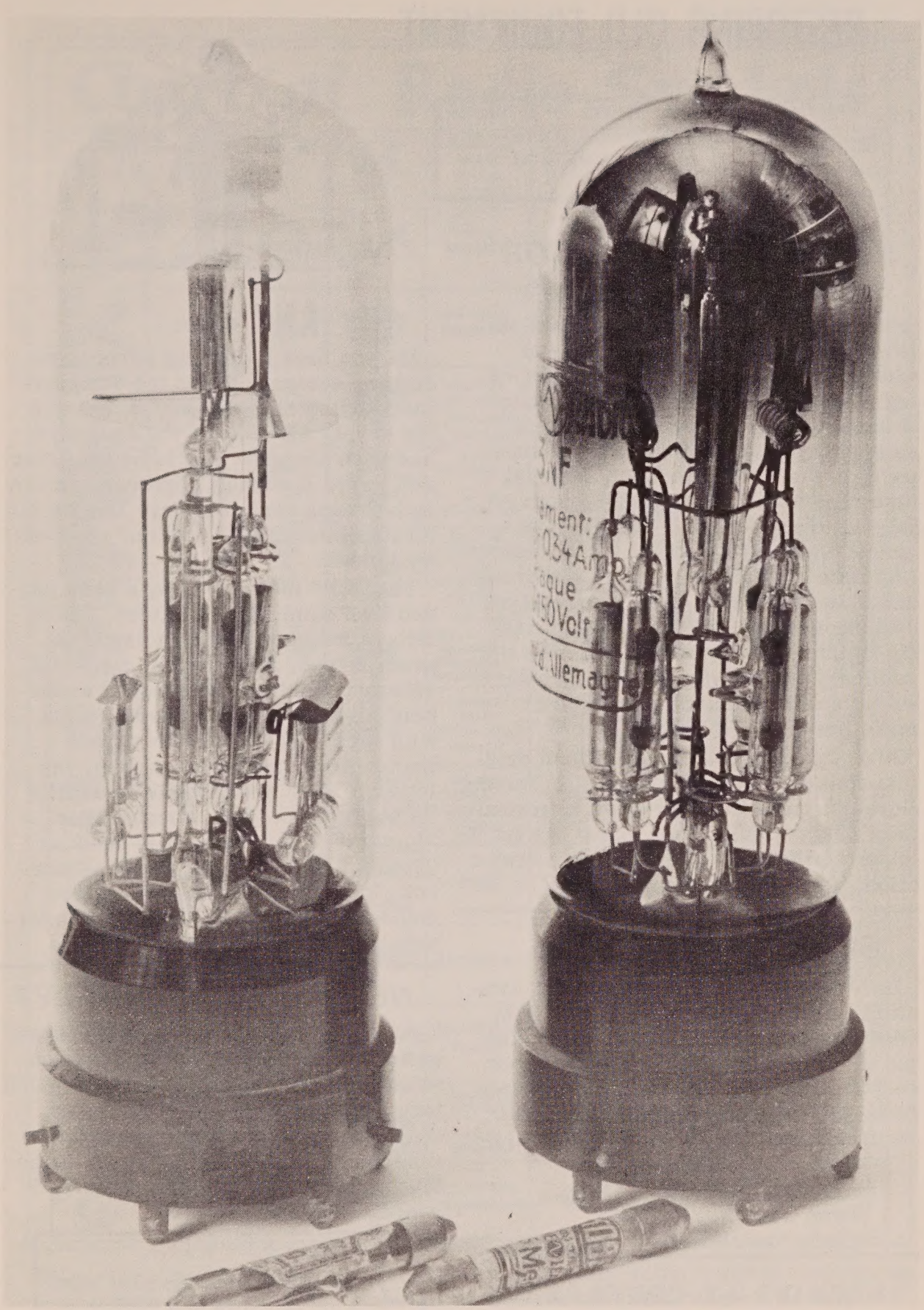
In early 1929 Loewe built a factory in England to make radios and tubes; complete technical specs on both were given in *Wireless World* for January 16, 1929. The September 25 issue carried an ad for a new model of receiver, the RO-433, which looked similar but incorporated regeneration for more sensitivity.

It used special plug-in coils instead of ordinary honeycombs, and a new tube, the RNF7 with a separate connection to the detector plate. The March 12, 1930 *Wireless World* listed the technical details of the new model, and also stated that two B-eliminators were available.

Loewe receivers were not sold in the United States, but Tobe Deutschmann of Canton, Massachusetts did sell Loewe resistors (see photo) with his own label on them. *RADIO NEWS* described the tubes (and resistors) in the July 1926 issue; the October issue pictured a home-brew receiver designed around the 2HF and 3NF. Other references are given in Tyne's *SAGA*.

LOEWE RADIO
This valve comprises three complete valve systems within the one bulb, together with the necessary coupling elements, and gives results equal, if not superior, to an ordinary three-valve set, at a much lower cost.
43/6
including royalty
(Valveholder 2/6 extra)
Complete receiving Set including 3 NF Valve and two coils for the lower wave band,
3 guineas.
The SET FOR THE MILLION!
LOEWE RADIO
REACTION RECEIVER
The Set for YOU!
70/-
Including Royalty and two coils for the lower wave-band.
For reception of local and distant stations the NEW LOEWE RADIO REACTION RECEIVER with the Triple Valve is unsurpassed. Even under the most unfavourable conditions with a small temporary aerial, this wonderful set has given fine and clear reception. The triple valve Type RNF 7 incorporated in the set makes it possible to work with reaction. With a 90-volt battery the set works splendidly, but extra power naturally follows if higher voltages (up to 150 v.) are employed. Send to-day for further particulars of
RADIO'S NEW WONDER
THE LOEWE RADIO Co., Ltd.
4, FOUNTAYNE RD., TOTTENHAM, N.15. Tottenham 3911/3912.
STAND No. G291, OLYMPIA.

Ad from Sept. 25, 1929
"Wireless World" magazine



LOEWE TUBES: Note internal complexity. Each envelope houses three tubes and associated components. The tube at left is possibly a forerunner of the 3NF. Tube at right is the 3NF with French label. At bottom are Tobe Deutschmann/ Loewe resistors which were available in this country.

RESTORING OLD EQUIPMENT

How did you SOLVE a problem when re-storing a receiver? Drop us a note telling how you did it.

RESTORING RCA VICTOR ELECTROLA MODEL 45

Perhaps the worst problem in this set is re-building the magnetic pick-up where one frequently finds the dampening material rock-hard-- hence little if any response. I have found a good dampening material for the pivot supports is the 3M micro-foam surgical tape, and for dampening block material, use Faber-Castell (magic-Rub) eraser properly fitted. The exceedingly fine wire coil may have to be soldered, and it is too fine for usual preparation. The enamel can be removed with a Q-tip moistened with GC strip-X (use caution), dry thoroughly. Then clean with alcohol, dry and let hot solder make the joint.

Other things equal, especially an original speaker, your recordings of Tommy Dorsey's trombone will sound essentially as it did originally. My pickup has functioned well for the past year after restoration. (Russell Hanselman)

SPEAKER RE-CONING

Do you have a damaged magnetic, dynamic or electro-dynamic speaker that needs a new cone? Emerson can do the job for you: new cone, new spider, new coil and new ring (will not re-wind open field coils on early electro-dynamics). Write for details:

Emerson Radio Service
9 Grant Avenue
Penn Yan, N.Y. 14527
(Tele. 315-536-8001)

BARGAINS AT CONFERENCE

AWA will have on hand high quality audio replacement transformers for Radio III, IIIA, Crosley, etc. @ $5.95 each. Also Vintage Radio books at original prices (no postage or handling charges!)

AN/---

Do you have a piece of government surplus equipment with the designation starting as "AN/---" ? Here is the key. "AN" means the equipment has been assigned jointly by the Army and Navy. It doesn't necessarily mean both groups used the gear. It does indicate, however, it is a major piece of equipment.

The "AN" is followed by a slant line and then comes three letters. These letters indicate (1) where used, (2) general type, (3) purpose. Once the category has been established a number is added. As an example, a set with: AN/APS-2 indicates it is a major piece of equipment (AN), the letter A after slant line tells us it is "Airborne", the "P" indicates it is "Radar", "S" tells us it is used for "Search" and "2" indicates it is number "2" in this category. One must obviously have the code chart to interpret the letters after the slant line.

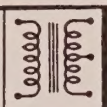
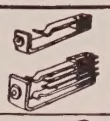
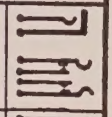
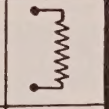
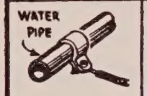
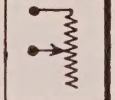
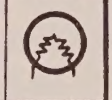
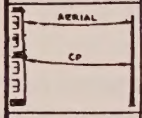
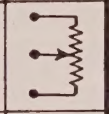
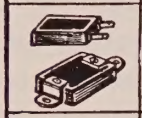
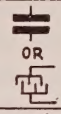
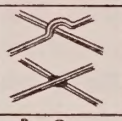
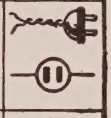
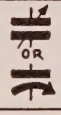
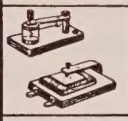
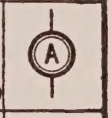
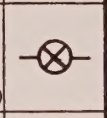
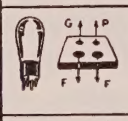
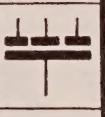
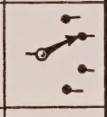
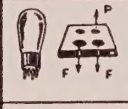
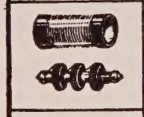
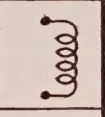
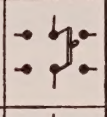
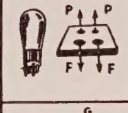
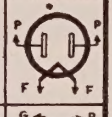
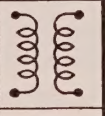
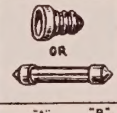
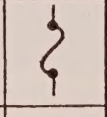
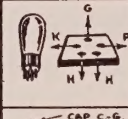
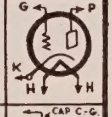
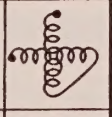
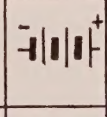
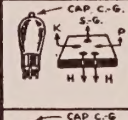
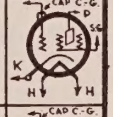
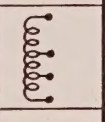
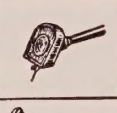
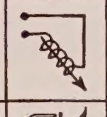
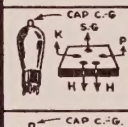
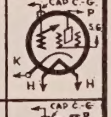
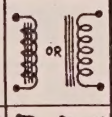
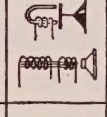
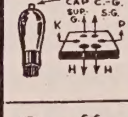
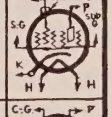
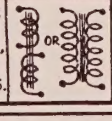
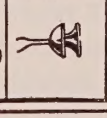
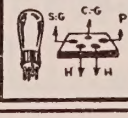
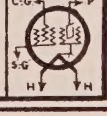
NEED A POWER SUPPLY?

--for your old battery receiver? If so, write Gary Schneider, 6848 Commonwealth Blvd., Parma Hgts., Ohio 44130 for information or check the one in the AWA Museum. A well-built and reasonably priced unit. The one in the Museum operates a 5-tube AK breadboard.

NEED WIRE ?

A source of various size wire for winding coils and hookup is now available. Send SASE for description and prices of material in stock. (Display at National Conference, Canandaigua.) Charles Day, Box 205, South Dartmouth, Mass. 02748

Chart of Radio Symbols

	AERIAL			PUSH-PULL AUDIO TRANS-FORMER			SINGLE CIRCUIT JACK DOUBLE CIRCUIT JACK	
	LOOP ANTENNA			FIXED RESISTOR			FILAMENT CONTROL JACK HEAD PHONES	
	GROUND			VARIABLE RESISTOR			VOLTAGE REGULATOR TUBE	
	COUNTER-POISE (CP)			VOLTAGE DIVIDER (POTENTIO-METER)			BINDING POST TIP JACK	
	FIXED CONDENSERS			WIRES NOT CONNECTED WIRES CONNECTED			LAMP SOCKET PLUG PLUG RECEPTACLE	
	VARIABLE CONDENSER			CRYSTAL DETECTOR PIEZO-ELECTRIC CRYSTAL			METER (MAY BE VOLT METER, AMMETER, OHMMETER, MILLIAMMETER, ETC.)	
	CONDENSERS OPERATED ON ONE SHAFT "GANGED"			SWITCH (POWER OR FILAMENT-SINGLE-POLE, SINGLE-THROW SW.)			THREE ELEMENT TUBE ("TRIODE")	
	CONDENSER BLOCK			SINGLE-POLE MULTI-THROW SWITCH			TWO ELEMENT ("DIODE") TUBE RECTIFIER FOR POWER SUPPLY OR DETECTION	
	R.F. COIL (MAY BE R.F. CHOKE)			DOUBLE-POLE DOUBLE-THROW SWITCH			FULL-WAVE RECTIFIER TUBE	
	R.F. COILS COUPLED (R.F. TRANSFORMER)			FUSE			THREE ELEMENT TUBE. A.C. HEATED CATHODE TYPE. ("TRIODE")	
	VARIOMETER (CONTINUOUSLY VARIABLE R.F. COIL)			BATTERIES			SCREEN GRID TUBE ("TETRODE")	
	TAPPED R.F. COIL			PHONOGRAPH PICK-UP			VARIABLE-MU SCREEN GRID TUBE	
	AUDIO FREQUENCY COIL. (MAY BE A.F. CHOKE)			MAGNETIC SPEAKER DYNAMIC SPEAKER			R.F. PENTODE TUBE	
	TRANSFORMER (MAY BE A.F. TRANSFORMER, PWR TRANS. OR FILAMENT TRANS.			MICROPHONE (TRANSMITTER)			POWER PENTODE TUBE	

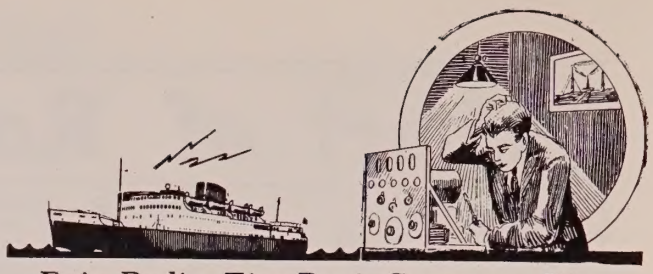
Some of our newer members have found that modern radio text and hand books do not show old time radio symbols. We believe the above chart will help the newcomer read most schematics.

EDISON BRICKS: One of Thomas Edison's many ventures was the Edison Portland Cement Co. formed in New Jersey in the early 1900's. One of the products was building bricks. Some of these lost bricks have been found and are now being sold at most Edison museums at $12.95 each.

NEW MEMBERS

who are (or were) with electronic communication or industry:

Arthur Williams (ZL4TIS) Telephone com. in New Zealand
Robert McCooley, Broadcast Stat. KUXL
Larry McCans, U.S. Army Signal Corps
Wm. Cottrell, W9DI, W.E. Engineering
Vincent Scotto (N2ALI), ex-WA6MJI) Chief Eng. Lake Champ. BC Co.
Ray Carson (K7RBR) Televison Tech.
Wm. Boyd, Radio Corp. of America
Jay King (N2BEB) US Army Sig. Corp
John Williams, Radio/TV producer and director
Robert Hopkins, Radio/TV business and commercial oper.
Roger Reinke, Nat'l Telecom & Info Admin., U.S. Dept. of Commerce
Patrick Marineau (K9HF) Radar USMC
Joseph Moomaw (W4XD/W4FZG) Owner 2-way radio company
Harold Hanson (WØSTE, ex-W2NSE) Merchant marine oper., Press Wire.
Jack Rieth (W8HQK) Radio Service
Luther Cuthrell (WB4VEJ) Communication Officer USAF
George Miller, I.T.T., Northrup/Paige
Richard Wehrheim (W9GG) National Broadcasting Co.
Rundfunk-Unk-Fernseh Museum Framersheim, West Germany
Bernard Stahl (W2HL, ex-2CVR) Stats. WPAP, WQAO, WMGM, WHN
Harold Kane, Stations WMGM, WHN, WRNY, WHEN, Radio FreeEurope
W.J. Scott (Winnipeg, Manitoba) Commerical ship operator
Benjamin Swezey (WØRAG) Univac
Joe Misson, Bell Telephone Co.
Arnold Chase (WAlRYZ) Program Director Stat. WTIC
Glenn Thompson, G.E. (Elec. Div.)
William Turner (W2WV) USA Satellite Signal Corp, Ft. Monmouth
Elwyn Gummelt (ex-K5KXU) Radio Ofc. R/V Hidalgo, Oceanography Dept., TAMU
Paul Bischoff (WØDVP) U.S.N. Radio
Groff Evans (ex-8BSP/CYC) Ft. Stanwix Tele. Company
Don Hirscher (W6LF) Commercial oper.
Stan Paulson, Stat. CFQC-TV



Eric Rudin, Fire Dept. Commun. Div.
Peter Harney (W2IEW) Weather Bureau Signal Corps
Anthony Musero (K3UKW), Ten Tec Co. and Drake Co.
Joe Brown (AKØV) USA Signal Corp
Joseph Bertain (WB5IQJ) U.S.M.C. & Microwave Tech.

AWA welcomes old time radio engineers, historians and collectors as well as newcomers in the radio field. Of the latter, a most welcome hand is extended to Kevin Multer, KA2HWJ. He operates 15, 40 and 80 cw, has built solid-state receivers and recently completed an old time two-tube regenerative set. Kevin is 12 years old and in the 7th grade.

MARKETPLACE

Now Available

A CATALOG for the collector restoring early radios. There has been a need for such a service for some time. Various members at one time or another have provided miscellaneous reproductions of one type or another-- but none have published a regular catalog devoted to this phase of our hobby.

The catalog will be photocopy 8 x 11" with many of the items illustrated. Roland Matson, the publisher, will keep a list of all catalog owners and send additional pages (gratis) as he releases new products.

Here are just a few of the available items: crystal detectors plus galena or silicon minerals, AK breadboards, all kinds of metal dial re-finishing including satin finish Kennedy, Westinghouse, etc., Crosley cabinets, panels, components, etc., odd type binding posts, etc.

The catalog cost is $2.00 plus 50¢ postage or $2.50 The $2.00 will be refunded on the first order of $10.00 or over. Send check to:

Roland Matson, 388 Concord Rd.
Bedford, Mass. 01730

"DENNE" GRAF ZEPPELIN CALLING

by D. K. deNeuf, WA1SPM

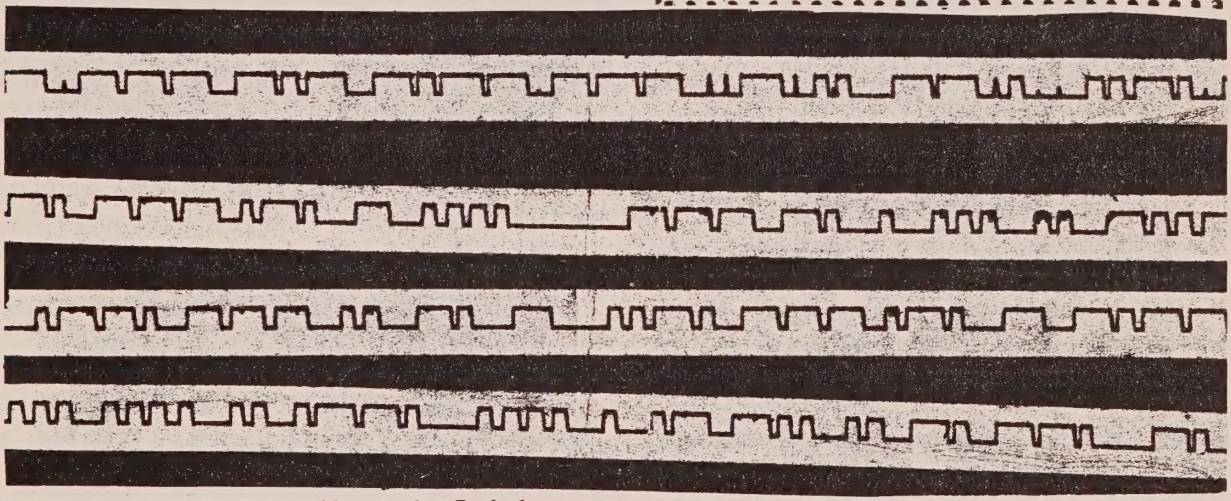
One of the most famous dirigibles, or "lighter-than-air" rigid airships was the Graf Zeppelin, named after the Germain designer Count Zeppelin. ("Graf" being "Count" in German.) The airship was actually a "transoceanic luxury liner in the skies", complete with accommodations for twenty elite passengers and was equipped with the best of china, linens and silverwave for serving its sumptuous meals - even a grand piano was aboard for entertainment. The crew numbered 41.

The Graf made numerous historic trips to South America, Africa and even to the North Pole. But the most noteworthy was its trip around the world in 1929. On its voyage across the Pacific from Tokyo to the USA, I was the ground communicator at RCA in San Francisco. Shown below is an actual undulator ink recording of *DENNE*'s CW signals I made at 1236 am PST 24 August 1929. (I don't need to unpack the press message shown on the tape - the old timers will read it directly.)

The Graf, despite its load of 3½ million cubic feet of hazardous hydrogen for lift never had an accident. Not so with a sister ship the Hindenburg which caught fire and burned at Lakehurst, New Jersey, May 6, 1937.

Thought for years to have been an act of anti-Nazi sabotage, it has since been pretty well proven to have been caused by a fire-bomb planted by a crew member who had timed it for the Graf's scheduled arrival at the Lakehurst Naval Air Station. Delayed in landing, the bomb went off just as the ship was approaching the station. The arsonist had rigged things so, he hoped, his wife could collect his insurance while he escaped and went into hiding. He was never found.

The famous US stamps issued honoring the Graf are shown in replica below. Incidentally in the philatelic world today they sell for well over $6500 a set!



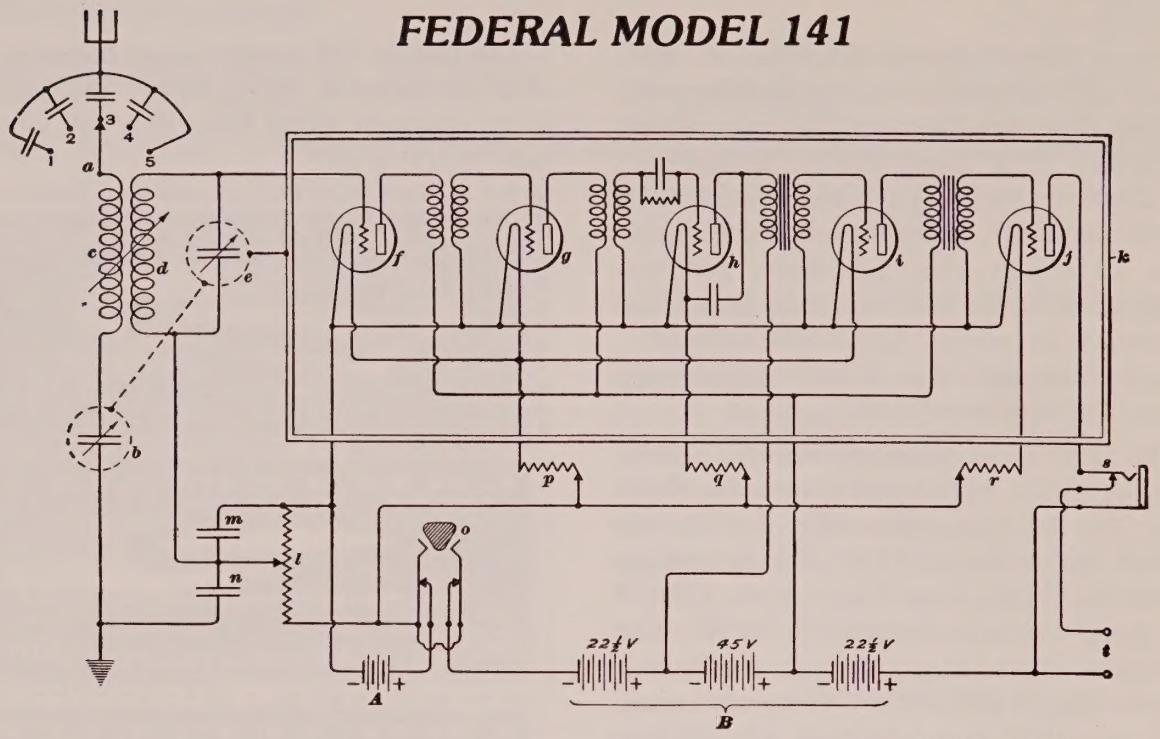
HISTORY OF PHILLIPS TUBE

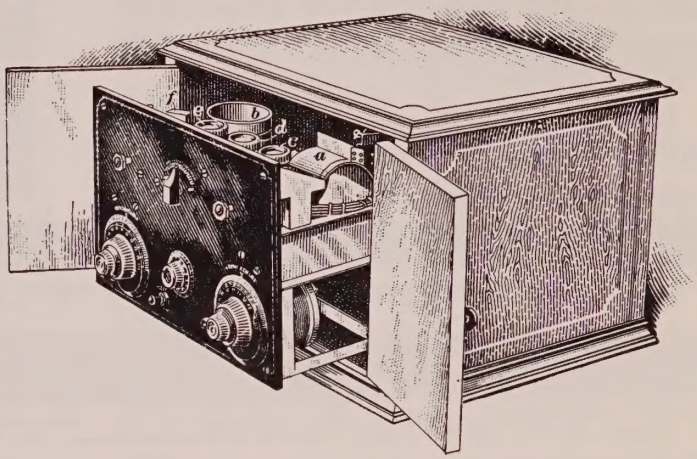
still available...

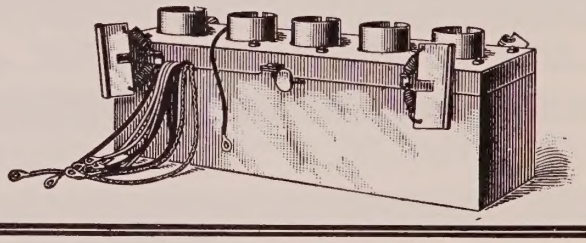
Fin Stewart writes that he still has copies of the "History of Philips Tubes" as reviewed on page 34 of the March OTB. A "must" for the vacuum tube collector. For information, write directly to: Fin Stewart,
674 Great Western Highway
Faulconbridge, N.S.W. 2776
Australia

CLASSIC RECEIVER OF THE MONTH

FEDERAL MODEL 141







This early broadcast set, made in Buffalo, is of unusual design as noted by the above schematic. Only the first stage is tuned with untuned 2nd RF and detector. Of particular interest is the shielded module construction mounted in a metal can housing assembly with components--a distant cousin of the fame RCA super-het catacomb. A most interesting receiver.

---Carl Zeigler

JUDGING OLD EQUIPMENT CONTEST

We were amused at some of the replies to the question in the last OTB (p. 21): "When is a set not a reproduction?"

The one that came out on top was:

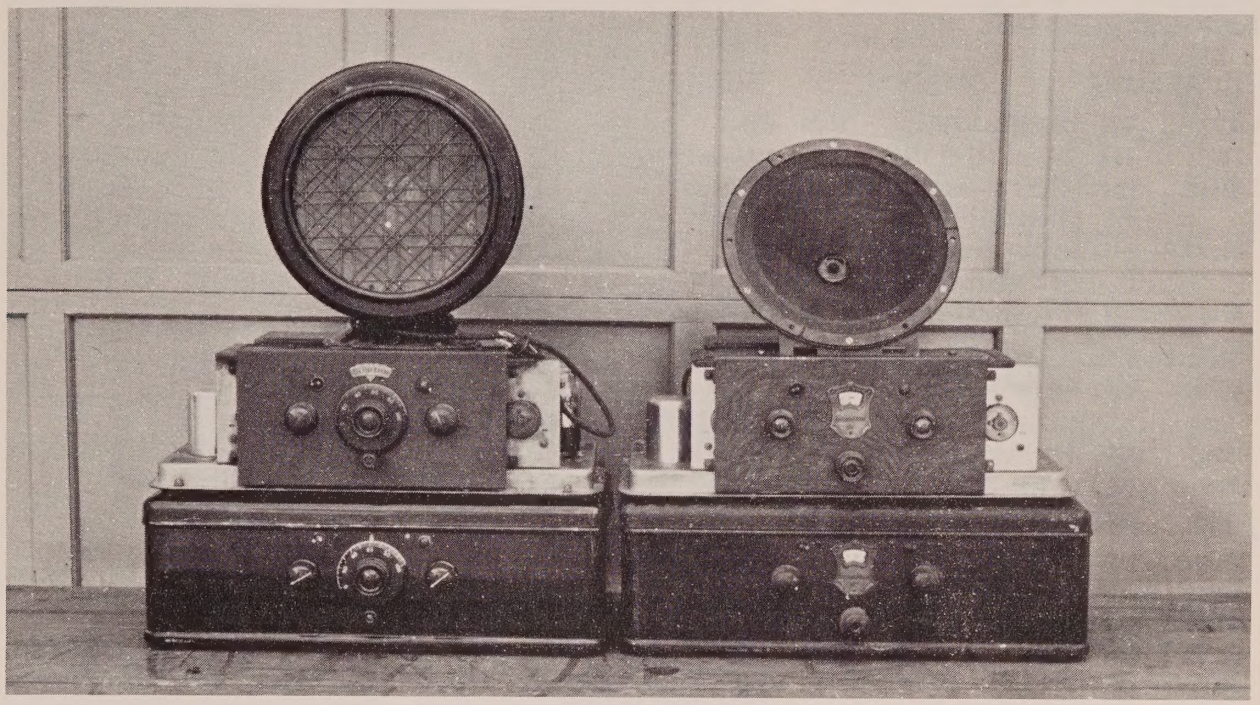
"If all components are authentic (of a given period) including hookup wire, baseboard and panel-- how can a judge tell the difference from an original unless he were told!"

I guess the moral here is to enter a set as an original and keep your mouth shut.

CHARLOTTE HAMFEST

Bob Lozier, Brian Harrison and Ron Lawrence went all out at the Charlotte, N. C. Hamfest with an exhibit of 24 different receivers (!) plus many loud speakers, tubes, magazines, etc. Jack Gutzeit, W2LZT (Advertising Manager for CQ magazine) said it was one of the best displays of its kind he had ever seen. A pix from Ron indicates a huge exhibit area tastefully laid out. Oh yes, the fellows had lotsa fun too!

Meet the Collectors



THE A-K 55 FAMILY

Have you ever been confused in trying to identify the Model 55 Atwater-Kent ? You have a right to since there were four (4) different panel versions of this model. The two bottom sets were table models which came equipped with an external speaker seen at left. The upper two sets were for consoles. These sets belong to Frank Pagano.

COLOR CODED TIPPED TUBES

Tube collectors may have in their collection some early color-tipped W. E. 215-A peanut tubes-- also known as "N" tube or the Navy designation CW-1344.

The April, 1923 "Navy Report" indicated they were having trouble with these tubes due to manufacturing variations in filament resistance. This was a serious problem since improper voltage shortened the life of the tube. They issued this notice:

--tubes which operate at 0.25 ampere between 0.8 and 0.9 volts are tipped with RED.

--tubes which operate at 0.25 ampere between 0.9 and 1.0 volt are CLEAR,

--and tubes at 0.25 ampere between 1.0 and 1.1 volts are tipped in BLUE.

OLD TIME RADIO CONVENTION

covering early radio programming, and personalities to be held at the Holiday Inn, Bridgeport, Conn. Oct. 3-4. For info write: Jay Hickerson, Box G, Orange, CT. 06477

"RAISE THE TITANIC"

If you wish to see a good movie [there aren't many nowadays worth seeing]-- be sure and see "RAISE THE TITANIC!" -- a $33,000,000 production to be released later this year. A preliminary technical review promises it to be one of the best in many years. [Review from THS COMMUTATOR]

NEW BANNER

The Association no longer has to apologize for the old felt banner which has taken on a most dilapidated appearance. A new replacement at a cost of $73.00 is now available for future AWA events.

AT LAST: REALISTIC TUBE PRICES!

A source of most tubes of the 30's and 40's are now available at reasonable prices... $1 used and $2 new plus postage. Tubes of the 20's (224A, 226, 227, 245, 280)@ $2. used (tested). Send SASE for list. Rick Weibezahl, 305 Belvidere Ave., Washington, N. J. 08882

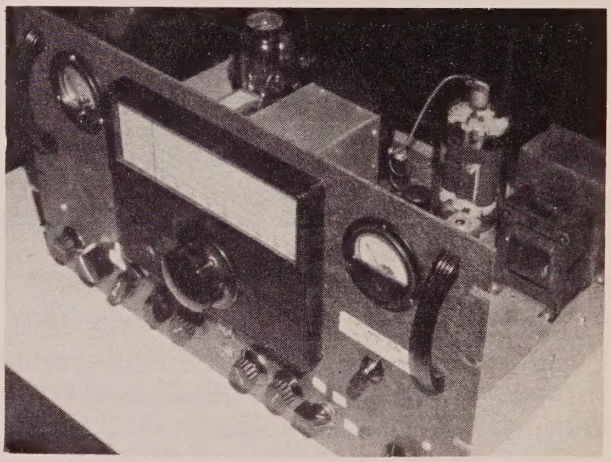
RESULTS OF 1980 AWA OLDE TYME CONTEST

by Ken Gardner, W2BGN

STATION	SCORE	TRANSMITTER		RECEIVER
W2LV	820	1852 ECO-(3) 6V6-813	250w	HRO
K4TS	804	Meissner SS- PP TZ40	100w	Patterson PR-15
W2HYN	724	59 Xtl-210-PP 211 6V6 Xtl-6L6-811+DX 100	300w	NC-100-X
W1PEG	664	6L6 Xtl-6L6- PP 809 6L6 Vfo-807- PP 838	125w 300w	HRO
W2LC	634	6AG7 Xtl-(3)807	140w	HQ-120
K2LP	534	47 Xtl-210-860-PP852		HRO and Mod.
W1DM	540	VT2 Vfo-VT2-211A	150w	VT1's PP Hetero.-VT1's-216A
W2BGN	495	205D Xtl-205D-211D	100w	HRO and Mod.
W8AU	368	6V6 Xtal - 807		34 det.-(2)30 aud.
W4NM	344	59 Xtl Tritet- (2)46	40w	Hallicrafters Sky Buddy
W3HWT	336	Hallicrafters HT-6	25w	NC-101-X
W8VSK	322	Mod.		NC-101-X
W2AN	320	6L6 Xtl-6L6-TZ40	50w	HRO
W3QA	309	RK20 Xtl Tritet	45w	FB-7
K2WW	308	Mod.		Comet Pro
VE3BDV	307	6L6 Xtl	25w and Mod.	NC-101-X
W7KE	209	210-410 MOPA	40w	SW-3 and Mod.
WA3KIO	192	45 TNT	3w	Super Wasp
W1LMS	180	6L6 Xtl-807	60w	FB-7
W4AWS	178	Mod.		Jim Lamb 1932 Single Sig.
W1BVL	178	6AG7 Xtl-807-703A (Arct)	125w	UX199-UY233 Reinartz/Batts.
W2FW	176	210 Xtl-210 Or UV202 802 ECO-807	45w 45w	FB-7-X
K8VBL	160	(1) 53 Xtl Xcvr	7w. Mod.	(1) 53 Det, Aud Xcvr. NC-101-X
WOJF	159	210 Xtl-210-203A	100w. Mod.	HRO
W1CRP	148	6F6 Vfo-6L6	15w	Regen 6J7-6K6
K2IC	144	Mod.		Mod.
VE4ZX	132	Mod.		SX-28
N4EE	130	Mod.		Breting 12
W1MB	128	210 TNT	25w	SW-3
W2AFE	124	210 Xtl-210	35w	Mod.
W8SS	119	Mod.		Mod.
W2IEG	116	6V6 Xtl-RK20	40w	FB-XA
W3MAS	108	6L6 Xtl	15w	HRO and Mod.
K2NP	106	Mod.		FB-7
AI4P	102	Mod.		Mod.
J3AAC	98	Mod.		Mod.
K1BH	96	210 Hartley	25w	FB-7 and HQ-120
W1AB	93	Mod.		Mod.
W9ASX	90	Mod.		NC-100
W2GB	78	Mod.		Mod.
W6CG	75	Mod.		Mod.
W3CWY/7	72	210 Xtl	3w	Mod.
W9HE	66	Mod.		Mod.
W7LIX	59	Mod.		Mod.
W8EGF/7	56	Mod.		Mod.
W3DUG	52	Mod.		HRO
WOFXY	50	Mod.		Mod.
W8AQ/4	48	Mod.		Mod.
W2VW	42	Mod.		Mod.
W2OWF	37	Mod.		Mod.
W9DZG	36	Mod.		HRO
K4CTG	36	Mod.		Mod.
K2RY	36	45 Hartley	9w	Mod.
W5DPM	34	Mod.		NC-101-X
W3RG	33	Mod.		Mod.
K4IM	29	Mod.		Mod.
W2ZUX	27	Mod.		Mod.
W1BPI	24	Mod.		SW-3
W4HII	24	210 Xtl (203-a)	17.5w	Regen UV199-199's
W4AIW	21	Meissner SS.-807	10w	Mod.
W2QLI	15	Mod.		Mod.
W5BOK	15	41 Xtl-807	20w	Navy RAL (Mod.)
W3INV	12	WE 205D TNT	10w	Natl AGS-RHM
W3VVS	12	Collins 4-A.47 Xtl-(2)46		NC-100-AX
W7LOG	10	Mod.		HRO
K6ARE	5	Mod.		Mod.
W9SG	3	Mod.		Mod.
W5TOS	3	Mod.		Mod.
W2RFY	3	Mod.		Mod.
K4DE	0	47 Xtl-210 Xtl on 7050Kh		FB-7

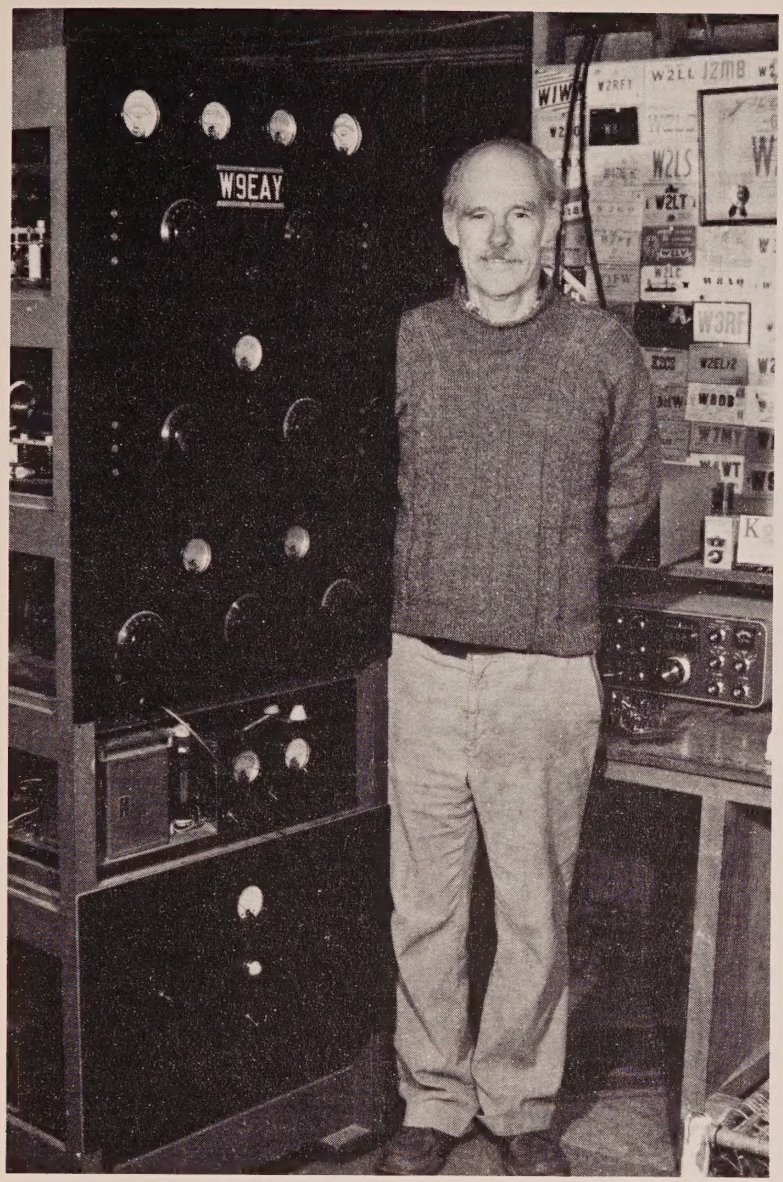
Note: There were nine other participants, some using OT gear, who did not submit logs.

WINNING TRANSMITTER



Pictured is the transmitter used by top-scorer Bob Morris, W2LV. Bob spent over three months building the compact xmtr which features ECO with single 813 in final rf amplifier.

(Cont. next page)



HIGH POWER OT TRANSMITTER

Participants in the 1980 OT Contest well remember the potent signal from K2LP. Pictured is the set originally made by W9EAW in 1933 which finally ended up in Bud Hall's shack: K2LP.

After much checking, replacing defunct parts, etc., it was finally fired up for 40 and 80 meter CW operation. Circuit: 47 xtal, 210 buffer, 860 buffer and pair of 852's push-pull final. As noted, components are located in a sturdy wooden rack with bakelite panels.

The final rf amplifier with its 852's make a nostalgic picture as the tubes give off a beautiful glow when the key is held down..and how about those 866 rectifiers blinking!

A set of this type was the ultimate for high power in the early 30's. The owner was the envy of all other hams in town. (Bud didn't comment on whether he had any TVI problems...hi.)

Close-Up [Cont. from p.13]

It was shown at the IHRS dinner, carefully packed and given to UPS for shipment. After several weeks of waiting with no delivery, Ross Smith placed a claim (it was insured for $500.)

Then there was action. The local UPS office was "on the spot"-- deliver or else..since an acceptance receipt had been signed by an unknown person other than myself.

After much detective work, UPS found it in East Bloomfield (it was addressed to Holcomb). I was told the signer opened the box and apparently finding nothing of value (some old movie film), tossed it into a closet. The AWA address was marked on both the box and film reel.

Why the UPS driver left it at an unknown and questionable location we'll never know since he is no longer with UPS! Apparently UPS drivers are told if the addressee isn't home, they can leave the package at a neighbor who may sign for it. This driver was even in the wrong town!

ARCTIC PIONEER

Hundred of AWA members have by now seen the Association's slide/tape show "Polar Adventure" featuring Bud Waite, W2ZK. I just read that Bud received further recognition for his daring 1934 rescue mission of Admiral Byrd in the form of a three-minute expression of gratitude from Sen. Harry Byrd (D-VA), the Admiral's nephew. W2ZK is the only living survivor of the rescue team.

73, B.K.

OLD TYME HAM ADS

OLD TYME ADS are FREE to members interested in collecting and restoring historical equipment as a hobby. They are not to be abused.

RULES FOR ADS:

1. Ad MUST be written on separate sheet of paper--not part of letter. Send SASE for acknowledgement.
2. Material must be over 25 years old and related to radio or electricity.
3. Give full address and Zip#.
4. AWA will not print repetitious ads or ones indicating regular sale for profit.
5. The Association is NOT responsible for any transaction.
6. AWA retains the right to reduce size of ad if over 8 lines including address.
7. Only ONE ad per issue per member.
8. Deadline for ads is 6 weeks prior to mailing date:

   March issue -- JAN. 15
   June issue --- APR. 15
   Sept. issue -- JULY 15
   Dec. issue -- OCT. 15

Important ! To insure delivery, out-of-state mail should be sent one week PRIOR to dates noted above.

Mail all ads to:

Antique Wireless Assn.
Main Street, Holcomb, N.Y.
14469 U.S.A.

WANTED

--Majestic Model 62 console chassis,working or not.Also want literature on same. Keith W. Gramlich, 250-08 87th Drive, Bellerose, New York 11426

--1939 Zenith w/Bakelite chassis & cabinet or correspondence with anyone who knows about it.IRE Proc. 1924,25 & post-40's. 1922-26 newspaper radio pages w/ads.Alan Douglas, Box 225, Pocasset, Mass. 02559

--ARRL Handbooks,QST,HR & 73. State condition and price. H.F. Schwur, 115 Intercept Ave. North, Charleston,S.C. 29405

--Super Zenith VIII or IX,also an ac operated RCA Radiola. Also want AK breadboard in good condx. Send SASE to C.G.J. Golodich, 23 Benson St, West Haverstraw, New York 10993

--National television 7M junker.Field strength/Line voltage meter must be intact. Joseph Benne Sr., 494 Hirsch Ave., Calumet City, Ill. 60409

--one vernier dial for A-C Dayton XL-25,two AFT's for Freed Eismann NR-7(good or bad),Vol. 2 & 3 of Riders. E.H. Allison, 5525 20th Ave., Sacramento, Calif. 95820

WANTED

--Radiola Senior wanted in fair to good restorable condition. Also want WD11 tubes. R. Marlow VE3LJK, 4 Corbett Ave., St. Catharines, Ontario, Canada L2N-5M4

--constructional details on Grimes Inverse-Reflex recvr (Popular Radio Apl '24 p.398). Also 'Tell-Time Tuning' dial for Case Allwave by US Radio & TV Co.Payment/shipping arranged within US. G. Askey, 106 North Avon Rd., Christchurch 1, New Zealand

--schematic/manual, L-37 for SP-600-JX-21 & E-scale/HRO. Ed Lawlor, 5 Pauline St., Carteret, NJ 07008

--output xfmr #55-009 and B+ choke for Hallicrafters SX32, UTC Type LS-25 audio xfmr.Also Edison long playing Diamond Disc records. Please state price. George C. Harris, 3212 36th St. Lubbock,TX 79413

--panel for Clapp Eastham HR or junker set,any parts for HZ amplifier.Early Riders manuals. Rick Weibezahl, 305 Belvidere Ave., Washington, New Jersey 07882

--18 gauge stranded rubber covered hookup wire in black,red or green & blue, 10 ft. of ea. Need to borrow pre-1930 Magnavox literature.Write before sending. R.E.Lozier, 318 E. Houston St., Monroe, NC 28110

--det.-amp. unit made by Doron Bros., Hamilton, Ohio. Buy or trade. Al Jochem, 2047 College Ave., Quincy, Ill. 62301

--horn & driver for Radiola Super VIII console,Kelford #44 10 ohm rheostat & switch for Priess 'straight nine',Music Master AFT.Please state condx and price. R. G. Thorn, 61 Maple Pl., Huntington,NY 11743

--World War II navy equip. RAL, RAO,RBA,RBC,RBL,RBH, etc. Howard Hill, 4117 Lymer Drive, San Diego, Calif. 92116

--Ferris Instrument Corp.,Boonton,NJ signal gen. model 22-A, 22-R or 22-D. State condx & price. Have Ferris manuals, want working instrument. L.B. Zimmerman,8448 N. Harding Ave., Skokie, Ill. 60076

--portables,pre-1930 especially unusual suitcase types.Also want early pre-1930 ac sets using Kellogg tubes or 199's. Will pay cash or trade cathedral or battery sets. M. Rosenthal, 507 S. Maryland Ave.,Wilmington, Delaware, 19804

--schematic of superhet built by GE for RCA for SS AMERICA and SS LEVIATHAN in early 1920's. Also schematics/photos of other rare comm. recvrs built in U.S. H.L. Chadbourne, 530 Midway St. La Jolla, CA 92037

WANTED

--complete base and driver for Western Electric D10 and Brandes Table Talker horn speakers. Cabinet for Aeriola Jr. Must be in good orignal condition. Phillip Drexler, 1175 E. Ripley Ave., St. Paul, Minn. 55109

--military radios built inside civilian style suitcases or any other type of WWII period 'spy' radios. Keith Melton,Box 2037, Odgen,Utah 84404.Call collect (801) 394-3290

--prewar(42-50 mhz)fm tuners/receivers such as Stromberg Carlson 425H,GE HM-80,GM-125, REL,Magnavox,Meissner,etc.Will be at Canandaigua to see & purchase. Al Germond, 211 Brenda Lane, Columbia, MO 65201 Tel. (314) 449-8035

--complete Deluxe Inter-mix record changer for Philco 41-616. Has light beam pickup arm,relay for remote control operation. Bob Goodman, 7943 Ponce Ave., Canoga Park, CA 91304

--line cord resistance of 300 ohms,cord to be in good condx. Gordon Eklund,6518 Gunpowder Lane, Prospect,KY 40059

--Allied catalogs 1933,44,45, 46,47,48,49,52,53.National sets 57,55,44,46,54,33.Hallicrafters S-19,S-38E.Give price and condx. William Hemrick,Route 1, Terra Alta, West Virginia 26764

--schematic or manual for Hallicrafters S-29 wanted by collector/restorer. Will buy or borrow to copy & will cover all costs. Ed Gable K2MP, 737 Latta Road, Rochester,NY 14612

--Gold Super Airline 01A tubes in good condx.,base w/ driver for Thorola horn,good horn for Magnavox R2 type B base,good xfmrs for Freed Eismann NR7 & Freshman Masterpiece. Charles Combs, 508 E. Daniel St. Albany, Mo. 64402

--four-position volume control switch & two knobs with pointers for Zenith Super VII or junker set with these parts. Maurice Murray,RR 2, Mt.Vernon, Ind. 47620

--Pilot Super Wasp and IP500. Please advise condx & price. Ralph Ernstein, 18934 Celtic St., Northridge, CA 91326

--on-off switch with knob,one flexible dialing shaft w/knob, the two horseshoe shaped springs for the dials & phono-jack,all for a Radiola VIII, or AR812. Bill Hennen, 324 Forest Ave., Aurora, Ill. 60505

--literature(original or copies) and complete sets, parts made by Charles Branston Co. of Buffalo.For use in researching company for talk. Dick Schamberger, 515 Crescent Ave, Buffalo, N.Y. 14214

WANTED

--Capehart radio-phono combinations,large RCA radio-phono combinations especially 9-54, U109,QU8 and parts for same. Joe Weber, 604 Centre St., Ashland, Pa. 17921

--knobs for Fada 480 & bracket for loop antenna.Also 3 point switch for AK20 and instruction cards for Grebe MU1 Synchrophase or copy of same. Arthur Williams, 26 Centre Street, Invercargill, New Zealand

--Cutting and Washington schematics,pictures or any info, Radiola 18 dial lite hood, Riders index for vol. 23. Joseph P. Schlosser, 7006 Scottsford Place, Worthington, Ohio 43085 (Tel. 614/889-8471)

--two AFT's for Westinghouse DA unit. Harry Williams, 1303 College Hill St.,Pleasant Hill, Missouri 64080

--Radio Broadcast, Radio News, Popular Radio,Early Shortwave mags.,old QSL cards and pennants (not amateur). All letters answered. John Sheridan, Flat 9/18 Orange Grove, Balaclava, Melbouren, Australia

--W.E. 7-A nameplate and on-off switch plate,Grebe RORK,RCA UZ1320 horn,Marconi yearbooks, and Wireless Age mags. Have E.I. Co. and other early components for trade or sale. B. Harrison,KN4R, 3227 Sudbury Rd., Charlotte,NC 28205

--Theremin-electronic musical instrument made by RCA about 1929. Phil Howell, 4508 Wayland Drive, Nashville,TN 37215

--ARRL Handbooks 1,3,4 & 5, 'Radio' handbook edition 1, QST's 1915-1924. Top cash. Ken Miller, 16904 Geo. Washington Drive, Rockville,MD 20853 (301) 774-7709

--Scott Philharmonic and factory made crystal sets. Please advise condition and price. Jim Thompson, 601 Ridgewood Ave.#108, Minneapolis, MN 55403

--Measurements 65-B signal gen. Main tuning knob,coils & brush boards for HRO-60. J.B. Reid, 656 East Madison,MS 38851

--early fans,ceiling,table,odd or unusual types.Have sets to trade. Richard Crane, 8391 N.W. 21st St.,Sunrise,Fla. 33322

--AK model 21 and early AK breadboard parts.Will pay cash or trade tubes,including WD11's (new),WD12's,Sodion S-13(new) and UV202s(new). Jerald Hueber, 6316 Winnebago Ct., Fort Wayne, IN 46815

--instruction manual and/or schematic for Supreme Analyzer model 333. T. Linton, WA3NBS, 206 Donnelly Ave., Aston,PA 19014

--Radio Broadcast mags.,full set,with covers. Condition and price,please. Floyd Lyons, 456 Post St., San Francisco, Calif. 94102

WANTED

--information/model no. of a Philco cathedral 17 in. high, 4 knobs,1A6,19,30 & two 32's. Farm radio? Thanks. Mike D. Sauer, 168 DHH MTU, Houghton, MI 49931

--Sodion tube for sensitivity study. Will purchase or pay fee for the loan and guaranteed safe return of same. Call collect (914) 778-1224. J.K. Bach, Ivy Hill Road, Walden, NY 12586

--scanning disc tv's and neon tv lamps. Bill Russell, 6463 ½ Fulton Ave., Van Nuys, Calif. Tel. (213) 989-4086

--glass dial scale 8½" x 2½" for Philco 40-180. Yates Hoag, W2ILD, 3 Fineview Dr., Utica, New York 13502

--crystal sets,Aerex,Aeriola X, Betta Phone, AC Gilbert,Gregsor,National Radiophone. Also Radiola RS radio. Have battery radios to trade or will purchase for cash. Dave Shanks,115 Baldwin St., Bloomfield, New Jersey 07003

--Paragon DA 2, a tulip style bell for a Burns horn spkr, a Sodion DR-6 and a Radiola Grand junker chassis or parts. Craig Huseboe, 2706 Nelson Road, Marshalltown,IA. 50158

--schematic/tube chart for Confidence Model 36 tube tester, mfg by Apparatus Design Co. Will pay any duplication and postal costs. Bill Alvarez, 19867 E. Vista Hermosa Drive, Walnut, Calif. 91789

--AM broadcast band tuning scale (E-F) for National HRO-60. Also need Hallicrafters spkr R-48,R46 or R42. M. Kelly McNair, 3994 Lakeside Drive, Odessa,Texas 79762

--Stromberg-Carlson model 520 (1941) for spare parts.Especially needed are pwr xfmr and speaker. Roy Snyder,Jr., 4802 Lake Otis Parkway, Anchorage, Alaska 99507

--technical data on WW II Aircraft Range Filter FL-8A or B. Need ckt. with component values and input and output impedance. Howard O. Lorenzen, W7BI, 9000 Lake Washington Blvd. N.E. Bellevue, Wash. 98004

--AK 33 knobs. R.W. Randall, K6ARE, 1263 Lakehurst Road, Livermore, CA 94550

--Paradex,Radiola III,Giblin, Carco,Queens either components or recvrs.Crosley 52 SD dialnut & pointer, Aeriola amp., 1 QRS 01A tube. J.W.Sears, 312 Auburndale St., Winston-Salem, NC 27104

--1940 Model Scott Philharmonic also pair of hf speakers for 1937 Philharmonic. Peter Best, Box 59, Bridgewater Corners, VT 05035

FOR SALE and/or TRADE

--several UV and UX type tubes, some AK parts,AF and RF xfmrs, callbooks, handbooks,dials,sockets,books,etc. SASE for list. Roy McCarty, 3960 N.W. 32 Terrace, Ft. Lauderdale,Fla., 33309

--Riders 1-16 with indexes $180. Riders abridged 1-5 $20. RCA service data vol 2 $10. Beitman radio 1939-1942 4 vol $20.Radiocraft radio circuits 1942 $6. Philco shop notes 1946-50 $10. Stan Novak, PO Box 940, Sarasota, Fla. 33578

--over 400 ac radio tubes 20's-40's,Sam's Photofact schematics 40's,parts,knobs,radios, speakers and tube tester. Best offer over $400 takes all. SASE for list. D.K. Szabo, 519 Tyson Ave.,Philadelphia, PA 19111

--type 484 tubes and Sparton model 600 radio chassis. A. Smith, Stonehedge, Lincoln, MA 01773 Tel. 617-259-9351

--radios (battery & AC),TV's (projection type),speakers. SASE for list. Al Mackenzie, 300 Pelly Ave.,N., Renton,WA 98055

--cabinets for: Stewart Warner battery set 8 1/2"x10"x19 3/4", AK Model 20, Clapp Eastham measures 8 1/2"x9 3/4"x30 1/2". Clarence Swartz, 7415 Van Ness Road, Baldwinsville, NY 13027

--extensive collection of museum quality radios,parts,books, tubes.Local pickup only. Dean Almandinger, 84 West Muriel, Orlando,Fla. 32806 Telephone (305) 422-8387

--Supreme signal gen. mod. 561 and Supreme Audiolyzer mod.562. Both $150. James Notaris, 1100 Welsh Road, Ambler,Pa. 19002

--Aeriola Amp.,BC-9A,Crosley 4-29,Riders,tubes,speakers, SASE for long list of radios. Bob Lane, 2301 Independence Ave., Kansas City, MO. 64124

--Lancaster bomber rec. & xmtr. (1155 & 1154), working with supplies, $150.Need base & driver for minature Amplion horn speaker.Need chassis,knobs,tubes for small Volksemfanger recvr. Lewis Bodkin, 665 7th Ave., Hamilton, Ont. L8V-1Z1

--HRO-M,9 coils, 2 supplies, 2 boxes;SX-43;2 dud WD-11's(bakelite) & numerous old tubes. SASE for list.Bruce M. Burkhardt Box 1, Royal Oak, Md. 21662

--Hallicrafters SX-42 mint restored, $100., S-86 perfect, $50,S-38A restored $30,AK-37 works & looks new $35.,Murphy TA152 (English)5 tube works fine $40. Don Dean, 1711 Colleen St., Sarasota, Fla.,33581 Tel. (813) 966-2661

--limited quantity of 864 tubes, stamped "RCA deForest" $7.50 ea. Callbooks & ARRL Handbooks, $5. each.James Fred, R1,Cutler,IN 46920

FOR SALE/TRADE

--key wind cw tape printer.Mfg. by J.H. Bunnell (1900).Heavy brass with cast iron base. Records 2 channels.Exc. condx. with original full roll paper. Rare.Make offer over $100. H.W. Merideth, 3912 Anderson Ave. SE, Albuquerque, NM 87108

--tubes,new:VT-24/864 6 for $ 26.50,also UX-30,UX-31,UX-32, mix or match, 6 for $ 21.50. All UPS prepaid, give street address. Will take xtal det. stands in trade.George Haymans, Box 2478, Gainsville, GA 30503

--large collection of rare tubes radio receivers,speakers,telegraph gear,etc. Send SASE for list. Vern Thompson, W9JWW, 1403 South Fourth St., Effingham, Ill. 62401

--trade W.E. 24B amp, want AK breadboard parts,types M,R & G horns and any other AK items. Want unusual 1 & 2 tube sets, 2 gd brass base tit top WD11's & WD12's. Ron Lawerence, 2334 Westerly Hills Dr., Charlotte, NC 28208 Tel. (704) 392-4233

--AK model 46,$ 50.;AK model 52 low boy metal console,$ 75.; AK model 60 wood floor model, $ 50.All work. J.W. Dates, Box 110,R.D. 2,Caton Rd, Corning; NY 14830

--reproductions of red push-buttons for late 30's Philco radios @ $6. for set of 8. Send me an original button so I may match the length. W.H. Brams, 2427 Durant #4,Berkeley, Calif. 94704

--trade Garrard RC 88/4B turntable(no base) for old radio, TV or ?. Gary Reif, 117 Pine St., East Rochester, NY 14445

--will trade deForest audion single wing triode tube for Fleming valve. L. J. Schnedorf, W9EWK, 610 Monroe Ave., River Forest, Ill 60305

FOR SALE/TRADE

--telegraph sounders,relays and related equipment,all pre-1917, mostly Bunnell or Western El. Sell or trade for older items. SASE for list. R.W. Reinke, 5301 Neville Ct., Alexandria, VA 22310

--receivers RAK-4,BC-344-D, Universal for plug-in coils, Grebe bc console serial #311094, Albert L. Woody, 402 Bjune Dr. S.E., Bainbridge Island, Winslow, WA 98110

--for sample copy of the Antique Radio Club of America 'Gazette', send $1. to: William E. Denk, Secretary, 81 Steeple Chase Road, Devon, PA 19333

--antique radio equipment photo registry.Protect your investment and show to advantage. Write for free details. Jack Allison, 160 South Country Road, East Patchogue,NY 11772

--trade AK10 breadboard,Kennedy Model V,National SW 4 DC power supply,Radio Craft mags. 1929-1954.Looking to buy or trade for Zenith 1R,3R or CRL series, Michigan MRC-1 or 2,DeForest Everyman's xtal set. Jim Cirner 13366 Pastel Lane,Mountain View,CA 94040

--AK35 in red lion secretary desk.Excellent condx.Make offer or will take cathedral radios on trade.Hallicrafters SX100 restored. Charles C. Fowkes, 4903 29th Ave. West, Bradenton, FL 33505

--Victor RE45 chassis,speaker, phono motor/turntable. Also have 1 AFT and Coils for David Grimes Baby Grand.Need set of coils & ac pwr supply for National SW5. Herb Balmer,610 N 14th,Marysville,KS 66508

--Dept. of Commerce 1924 edition of amateur radio callbook. Make offer. W1AOG, 15 Park St. Ct., Medford, Mass. 02155

FOR SALE/TRADE

--Scott Radio-phono player model 800B in a beautiful Chippendale cabinet. J. Albert Warren, Box 279, Church St., Waverly, Pa. 18471 Tel. (717)587-2405

--spark xmtr key by JH Bunnell, Murdock spark gap 1914,xmitting condenser Dublier Co. made for Navy Dept. all on finished board See Duck cat. no 13,p 108. $700. Arthur J. Bardish, 4042 Herman Ave. SW, Grand Rapids, Mich. 49509

--double cotton covered wire, double nylon covered 'silk' wire in green and red,tin coated bus wire.Most popular sizes available.SASE for listing. Charles Days, P.O. Box 205,So. Dartmouth Ma. 02748

--antique wireless equip. collection of Jim Fisk,W1HR, former editor in chief of Ham Radio magazine. Send SASE plus $1. for list to: Mrs. Diane Fisk, P.O. Box 429, Hollis, New Hampshire, 03049

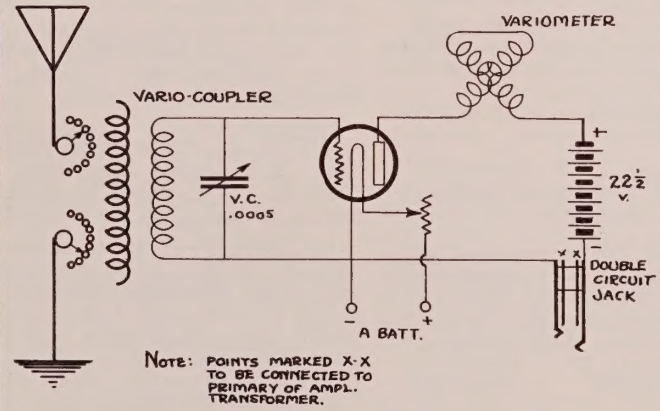
--ICA 3 in 1 radio tuner,no. 93. In original box w/instructions and catalog of other ICA prod. $ 6. postpaid. W9VZR, 4627 Bartlett Ave., Milwaukee, WI 53211

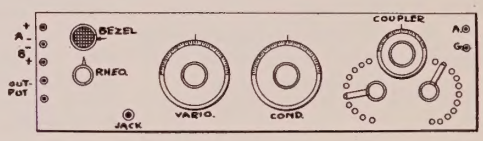
--AK model 37-C chassis parts for sale, but no power supply parts. List your wants. SASE. Gerald J. Windau, 627 Foster St. Fostoria, Ohio 44830

--estate of K2KS includes telegraph instruments,tubes,test equipment,racks,gear,etc.Send SASE. Don Whittemore, 36 Masterton Rd.,Bronxville,N.Y. 10708

OCT. 15 is deadline for the next Bulletin. Try and mail before OCT.8 and keep ads short ---- several current ads had to be cut. Also, please indicate if ad is "Wanted" or "Sell/Trade".. we can't read your mind.

An Excellent Type of Receiving Set

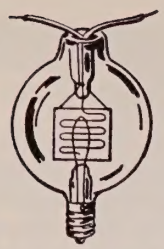




PARTS

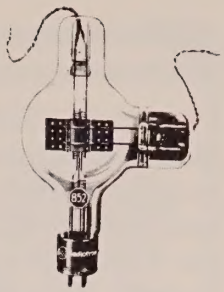
VARIO-COUPLER
TAPSWITCHES & POINTS
.0005 mf. COND. VAR.
DETECTOR TUBE
SOCKET
RHEOSTAT
VARIOMETER
22½ v. B. BATTERY
DOUBLE CIRCUIT JACK
"A" BATTERY
2000 OHM PHONES
PLUG FOR SAME
BEZEL
7 BINDING POSTS
PANEL, SIZE SUITABLE FOR APPARATUS

A de luxe receiver of 1921-22 design. Regeneration was controlled by the variometer. Typical tube is the UV-201.



THE TUBE COLLECTOR

Conducted by Gerald Tyne



OBSOLETE TUBE SUBSTITUTION

For those of us that have access to few if any 01A, 99, WD11 or 12 tube types, any reasonable substitute is most welcome. Although I do have a few of these old timers, I still use "subs" for setup, test and just generally listening for fun.

All that is needed is the appropriate base, a miniature seven-pin socket and one of the several 1.5 or 3.0 volt receiving tubes such as 1S4, 3S4, 3Q4 or 3V4.

Many of these will range from satisfactory to near identical in performance and characteristics. Simply connect G_2 to the plate and treat it like a triode.

The filaments can be used as is, series or parallel, and in some cases resistors may be needed to duplicate the voltage and/or current requirements.

Shown are several illustrations. Fig. 1 is the most involved by far but it does make a pretty good 01A and a very good 71A. To start, discard the glass envelope from the old burnt out tube leaving the base. Solder in connecting wires. Although it is not absolutely necessary, it will be better to pot with wax, pitch or even plaster of paris to better dissipate the heat from the resistors.

These little 3.0 volt pentode vacuum tubes will handle 15 ma. when used as triodes and have an amplification factor of 5. The plate source impedance is about 3000 ohms.

Although the gain factor (5) is lower than that of a 99 (6) or an 01A (8), the plate impedance is substantially lower. If any significant loading appears in the plate circuit, the net gain can be easily equal to or greater than the old tube types.

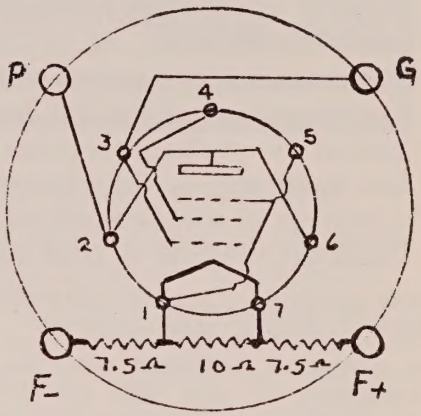
The filaments of the 3 volt tubes are center-tapped and can be connected parallel for WD11 or 12 replacements and in series for the 99's. The series/parallel resistor network must be used for 01A replacement because the filament source is much too low to be controlled by the original rheostats.

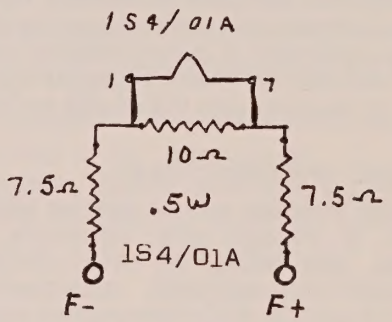
Although most of these tube types are no longer listed for sale, suppliers often have some on hand and usually at a much reduced price.

-- John Birdsong

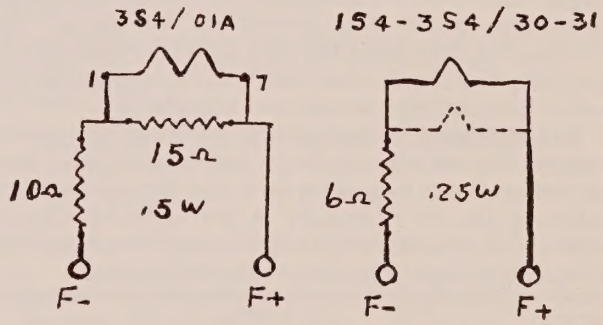
Fig. 1
1S4/01A

Resistors
.5w. 5%





With substitute tube in socket, apply 5. volts across "F" and adjust (shunt) any resistor for 1.4/2.8V at 1 & 7 if necessary.



AWA MUSEUM ACCESSIONING POLICY

Effective earlier this year, the AWA Museum Committee adopted a firm policy concerning donations. All equipment in the Museum is the property of the Association with "no strings" attached. This is not an original concept since it is common practice with all public museums.

This means the donor cannot insist on a certain type of display for his gift, cannot re-claim an artifact after AWA has restored it, etc. Printed below is a portion of a notice released by the Regional Council of Historical Agencies:

THE MUSEUM COLLECTION POLICY IS A VITAL KEY TO SOUND MANAGEMENT

A collection statement sets the policy for legal ownership of gifts with no strings attached. It determines loan procedures for short-term exhibits. It offers guidelines for security, storage, conservation, insurance, accessioning and cataloguing of all objects within the collection. A good collection policy even has rules of thumb on what to accept as a gift and what to refuse. It basically sets the course for a museum's future.

CLEAR AND UNCLEAR TITLE

The most frequent way to acquire additions to a collection is through gifts, donations, purchase, exchanges and loans. IN ALL CASES, IT IS IMPORTANT TO RECORD IMMEDIATELY THE CIRCUMSTANCES ACCOMPANYING RECEIPT OF NEW ARTIFACTS OR ARCHIVAL MATERIAL AND TO DRAW UP LOAN OR GIFT AGREEMENTS.

THE COLLECTION SHOULD BECOME A PUBLIC HERITAGE

Legal ownership of collections should be vested in the governing board and collections fall under their trusteeship. This transition of a collection from private property to a public trust needs to be recognized fully when formulating policies and objectives.

All individuals or institutions donating (or loaning) objects should sign a gift (or loan) agreement. Such agreements can be brief in form and the services of an attorney are not necessary. A gift agreement simply states that a museum has received a gift from a certain person who has relinguished all control over it.

DO NOT TAKE RESTRICTED GIFTS

Individuals often attempt to make their gifts contingent upon the fulfillment of certain stipuations, e.g. that the gift always be on display; that the name of the donor or some designated relative be included prominently in the display; that all the items in the gift be kept together physically both in the files and on display. Gifts with "strings attached" should be avoided because they restrict the trustees and staff in future planning.

AVOID LONG-TERM LOANS

Materials on long term loan may require sufficient attention and space which can hamper the development and growth of the museum's permanent collection.

Small history museums housing long-term loans are responsible for property that does not belong to them - a bad business practice. In all museums all practical safeguards should be taken to protect a collection. Remember all borrowed objects must be treated as well as your own artifacts. They must be preserved, sorted and inspected to determine need for cleaning and repairing and stored safely. Records must be kept meticuously.

Lenders can create administrative headaches. They or their heirs may object to the ways in which their loaned artifacts are used and cared for. The one exception to accepting loans is for a short term to be used in special exhibits. Even, then, a loan agreement has to be signed.

RCHA Information Sheet #47

AWA has a duplicate "transmission record" form which describes the object donated and a statement covering the conditions under which the object is received. It is signed by both donor and a member of the Museum Staff.

The donor receives one copy and AWA the other. Objects which are left at the Museum or on the "doorstep" without proper acknowledgement, are considered "abandoned" and obviously not recorded. Yes, this frequently happens. Boxes of old parts, tubes, an old set, etc. are frequently left without identification or request by the donor for a receipt.

BROADCAST PIONEERS LIBRARY

HUGE COLLECTION DONATED

The Broadcast Pioneers Library located in Washington, D. C., is the recipient of a valuable gift of early television photographs from the St. Louis Post-Dispatch. The gift to the Library contains approximately 10,000 photos of television personalities and programs from the 1940s to the 1960s. Many of the celebrity photographs features stars were were also popular radio entertainers.

ANOTHER LARGE COLLECTION

What is reported to be the most extensive collection of newsreel film, the library of "Movietone News" is being donated by Twentieth Century Fox to the University of South Carolina. The 60 million feet of film, 60% of which are 'outtakes', provide vivid imagine history from 1919 to 1963.

BOOK & MAGAZINE REVIEWS

HISTORICAL LOOK AT TELEVISION
June, 1980 "Radio Electronics"

A well illustrated documentary on the development of television from the earliest days to present. Not too technical-- excellent for the average radio/TV historian. [C.Z.]

MAGIC OF HAM RADIO

by JERROLD SWANK, W8HXR

Here is a book for the prospective ham as well as old timer. The first section of the book is a brief history of amateur radio-- and well written too. The remaining pages are devoted to adventures and fun of amateur radio of which Jerry played an important part. Good reading. The book may be obtained from:

"73" Bookstore
Peterborough, N. H. 03458

(Book #Bk-7312, price $4.95 plus $1. for handling and postage.)

TUSKA

REPRINT CATALOGS AVAILABLE

With the current interest in Tuska equipment, collectors may need reference. There are now available two excellent reprints originally published by the C. D. Tuska Company: Tuska #1 (1919) catalog showing tubular detectors, etc. (24 p.) and Tuska #3 (1922) which illustrates models from 220 thru 226 plus many parts. In addition, A-K buffs will find a valuable breadboard folder illustrating early models in detail. Each booklet is available at $3. each postpaid. Mail order to: Arthur Aseltine, 345 Glenwood St., Ann Arbor, Michigan 48103

BEST HISTORICAL MAGAZINE

--reviewed so far this year is the huge commemorative issue of "Electronics" for April 17, 1980. It is not just another issue which touches lightly on radio history-- it is a well written "book" covering the entire field! Terrific reading which will keep one turning the pages for many an evening. The chapters on transistors and IC development are particularly good. (R. R.)

GERMAN TV RECEIVER

Don Meade, K4DE sent me an ad from the Bosch Technical Journal (German) showing an early "Fernseh 30" television receiver. The year: 1929. The set is mounted in a table cabinet and is of course a mechanical scanner. At the bottom of the ad was the following notation:

Rob. Bosch A. G./Loewe Radio/Zeiss Ikon A. G./Baird Ltd.

Watch for a new movie soon to be released titled:

"THE SECRETS OF NIKOLA TESLA"

HENRY or STONE ?

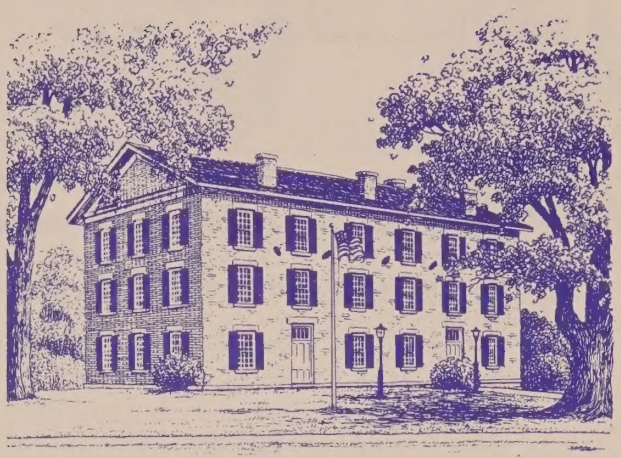
Grab your last Monograph "Tesla vs. Marconi" and look on page 2, Figure 1... the pix of John Stone Stone... Several readers say it resembles a gentlemen by the name Joseph Henry..

MEMORIAL SCHOLARSHIP FUND

The Association recently made a donation to F. A. R. in memory of Ed Redington, W4ZM. The Foundation is a non-profit organization which uses funds for scholarships. A most worthy cause. For more information, write:

Kenneth Joseph, W4SIG
9416 Hermosa Dr., Fairfax, VA. 22030

THE MUSEUM



A.W.A. HISTORICAL MUSEUM

East Bloomfield, N.Y.
Bruce Kelley, Curator

Museum Hours:

Sunday ——— 2 to 5 P.M.
Wednesday ——— 7 to 9 P.M.
May through October

Open to groups by appointment
Tele. (716) 657-7489

Free Admission

Museum Telephone:
(716) 657-6260

VISITORS AT MUSEUM

Attendance so far has been down slightly as compared to previous years; however, several from faraway places have found their way to East Bloomfield: Argentina, Venezuela, England-- and Pacific ARRL Director Bill Stevens (W6ZM) and ARRL Vice-President Carl Smith (WØBWJ).

MUSEUM INVENTORY UP-DATED

The AWA Museum Staff has just made another inventory of all large and significant artifacts in the Museum. Each item is coded, donor's name and evaluated for insurance purposes on tape cassettes. The cassettes are played back and information typed for eventual recording on IBM cards.

A.W.A. BADGES

The large orange badges worn by members at radio meets are again available. The badge has a large plastic window and insert on which the wearer writes his name and other identification. A masthead and old radio call letters surround the opening. Available @ $1.25 at "meets" or $1.50 by mail ppd.

Lincoln Cundall
69 Boulevard Parkway
Rochester, N. Y. 14612

New Equipment

in A. W. A. Museum

(sets, parts, magazines, books, etc.)

W2PHT, W6SAI, WA2JMH, K4SL, W6GH, W2OWF, W1ECK, K2RSY, W2HD, W2AY, K2DXE, WB2IGD, W2OUM, W4WZU, WA2IEO, Serge Krauss, Gordon Brown, Groff Evans, James Doolittle, O. Lindan

Of the several new pieces of equipment in the museum, two are of interest to TV historians. From the estate of Gordon Brown (former owner of BC station WSAY) AWA acquired two mechanical disc television sets: one a homemade 24 hole set and the other a horizontal drum type made by "Shortwave & Television Corp." of Boston. The latter uses a thin sheet metal belt type disc with very small holes. The company was owned by Hollis Baird who also operated station W1XAU and was guest speaker at an AWA Conference several years ago. The homemade set has been setup for demonstration purposes by replacing the Raytheon Kinolamp with a small light bulb. Both sets are circa 1928-30.

A rare and beautiful lithograph is now in the old telegraph station. It is a picture of an attractive women wireless operator in an unique frame with simulated sparks and letters "CQD". It is believed to have hung in an early United Wireless station about 1910. A gift from Vance Philips, W6GH.